24-month Chronic and Carcinogenic Inhalation Toxicological Study of Methanol in Fischer Rats

(Vol. 7)

Individual Major Pathological Findings (Male) Individual Pathological Findings (Male)

September 30, 1985

Mitsubishi Chemical Safety Institute, Ltd.

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. CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL'FINDINGS

LEVEL AND SEX : 0 PPM MALE

			!				STUDY NO. 83004
ANIMAL	1)	2)	0 D Y			PROBABLE CAUSE OF DEATH	REFERENCE
NUMBER	1	UATS	INITIAL	FINAL	GAIN	MAJOR PATHOLOGICAL FINDINGS .	(APPENDIX NUMBER)
0001	>-	733	114.2	444.3	330.1	LEYDIG CELL TUMOR: TESTES	11-M1-0001
0000	>	733	119.8	417.6	297.8	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS KERATOACANTHOMA: SKIN LEYDIG CELL TUMOR: TESTES	11-M1-0002
0003	>-	733	115.5	479.7	364.2	LEYDIG CELL TUMOR: TESTES	11-M1-0003
7000	>-	733	118.9	452.2	333.3	LEYDIG CELL TUMOR: TESTES	11-M1-0004
5000	>	733	114.7	478.5	363.8	LEYDIG CELL TUMOR: TESTES MONONUCLEAR CELL LEUKEMIA: MULTIPLE ORGANS MESOTHELIOMA: PERITONEUM	11-M1-0005
9000	>	733	120.3	453.7	333.4	LEYDIG CELL TUMOR: TESTES	11-M1-0006
0000	×	721	114.4	343.2	228.8	ADENOMA: PITUITARY GLAND	11-M1-0007
0000	3	687	122.4	349.1	226.7	LEYDIG CELL TUMOR: TESTES MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS FIBROSARCOMA: SKIN (SUBCUTIS)	11_M1-0008
6000	>	733	120.4	430.0	309.6	LEYDIG CELL TUMOR: TESTES	11-M1-0009
0010	W	809	127.0	389.1	262.1	LEYDIG CELL TUMOR: TESTES	11-M1-0010
1) FATE: 2) DAYS:	Y KILLED ON SCHEDULE AFTER START OF TREATME	Y , KILLED ON SCHEDULE ; AFTER START OF TREATMENT.	W KILLED IN	1	EXTREMIS		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

APPENDIX 10-M1-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

STUDY NO. 83004

ANIMAL	. 1)	2)	BODY	WEIGHT (
a a a a a a a a a a a a a a a a a a a		DAYS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1		REFFERENCE
			INITIAL	FINAL	GAIN	MAJOR PATHOLOGICAL FINDINGS	(APPENDIX NUMBER)
0010	(CONTINUED) 0010 W	808	127.0	389.1	262.1	MESENCHYMOMA: SKIN (SUBCUTIS) PAPILLARY ADENOMA: LING	
0011	> -	733	116.4	7777	328.1	LEYDIG CELL TUMOR: TESTES ' ISLET-CELL ADENOMA ' PANCREAS	11-M1-0011
0012	>-	733	115.3	475.7	360.4	LEYDIG CELL TUMOR: TESTES	Z 1
0013	3	714	111.3	554.5	443.2	TESTE 3CUTIS EUKEMI	11-M1-0013
0014	>	734	112.0	450.2	338.2		11-M1-0014
0015	>-	734	103.4	381.2	277.8	ADENOMA: PITUITARY GLAND C-CELL ADENOMA: THYROID GLANDS	11-M1-0015
0016	3	435	114.1	351.0	236.9	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS	11-M1-0016
0017	> -	734	122.7	504.1	381.4	LEYDIG CELL TUMOR: TESTES FIBROSARCOMA: SKIN (SUBCUTIS)	11-M1-0017
1) FATE : 2) DAYS :	W KILLED IN A FTER START OF	IN EXTREMIS : OF TREATMENT.	Y / KILLED	NO	SCHEDULE .		

APPENDIX 10-M1-3

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

ANIMAL	1)		1				Y NO.
2	FATE	DAYS .	1	WE1GHT (6)	SE OF DEATH	REFFERENCE
			INITIAL	FINAL	GAIN	UK LOGICAL F	(APPENDIX NUMBER)
0018	>	734	117.6	500.7	383.1	IG CELL TUM OSARCOMA: S	11-M1-0018
0019	>-	734	117.1	6.094	343.8	(SUBCUTIS) PHEOCHROMOCYTOMA: ADRENAL	. 11-M1-0019
0050	>-	734	121.3	468.5	C 272	LEYDIG CELL TUMOR: TESTES	
					1	CCECL ADENOMA: 1HYROID GLANDS PHEOCHROMOCYTOMA: ADRENA!	11-M1-0020
						CEYDIG CELL TUMOR: TESTES FIBROSARCOMA: SKIN (SUBCUTIS)	
ć	:					PAPILLOMA: SKIN	
T N D D D D D D D D D D D D D D D D D D	≥	726	116.2	480.2	364.0	ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS	11-M1-0021
0025	M	670	109.9	361.1	251.2	ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES	11-M1-0022
0023	>	734	115.1	455.4	340.3	GLAND	11-M1-0023
0024	3	673	119.3	389.9	270.6		11-M1-0024
1) FATE: 2) DAYS:	Y X KILLED ON SCHEDULE ; AFTER START OF TREATMFNT	N SCHEDULE ;	W × KILLE	ED IN EXTREMI	EMIS.	GLANDS	

APPENDIX 10-M1-4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

STUDY NO. 83004	TITLE REFERENCE	(APPENDIX NUMBER)		11-M1-0024	11-M1-0025	11-M1-0026		11-M1-0027	, 11-M1-0028		11-M1-0029	11-M1-0030		11-M1-0031
	PROBABLE CAUSE OF DEATH	OR MAJOR PATHOLOGICAL FINDINGS	1	FIBROSIS: HEART	LEYDIG CELL TUMOR: TESTES	ADENOMA: PITUITARY GLAND	LIPOMA: SKIN (SUBCUTIS)	LEYDIG CELL TUMOR: TESTES MESOTHELIOMA: PERITONEUM	PHEOCHROMOCYTOMA: ADRENAL	GLANDS LEYDIG CELL TUMOR: TESTES	ENCEPHALOMYELITIS: BRAIN ENCEPHALOMYELITIS: SPINAL CORD	LEYDIG CELL TUMOR: TESTES HEPATOCELLULAR CARCINOMA . ITMED	PHEOCHROMOCYTOMA: ADRENAL GLANDS	LEYDIG CELL TUMOR: TESTES ISLET-CELL ADENOMA : PANCREAS SQUAMOUS CELL CARCINOMA : SKIN
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6)	GAIN	; 	270.6	348.4	405.3		373.7	357.0		229.6	336.7		311.3
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	WEIGHT (FINAL		389.9	467.8	514.8		480.6	478.6		344.6	442.1		439.1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B00Y	INITIAL		119.3	119.4	109.5		106.9	121.6		115.0	105.4		127.8
	2) DAYS	 		673	734 .	734		623	735		356	735		735
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1) FATE		(0:	3	>-	>		3	>-		3	> -		>-
	ANIMAL	NUMBER	(CONTINUED)	0024	0025	0026		0027	0028		0029	0030		0031

1) FATE: W , KILLED IN EXTREMIS; Y , KILLED ON SCHEDULE.
2) DAYS: AFTER START OF TREATMENT.

10-M1-5 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1	! ! ! ! ! !		0
ANIMAL	1) FATE	2) DAYS	BODY W	EIGHT (6)	SE OF DEA	REFFERENCE
NUMBER	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		INITIAL	FINAL	Z I	ш	-
0032	>	735	117.0	482.3	365.3	LEYDIG CELL TUMOR: TESTES PHEOCHROMOCYTOMA: ADRENAL GLANDS FIBROMA: SKIN (SUBCUTIS)	11-M1-0032
0033	>	735	121.3	479.3	358.0	LEYDIG CELL TUMOR: TESTES	11-M1-0033
0034	3	. 989	122.0	394.2	272.2	LEYDIG CELL TUMOR: TESTES CORTICAL TUMOR: ADRENAL GLANDS MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS GRANULOMATOUS PNEUMONIA : LUNG CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY : KIDNEYS	11-M1-0034
0035	>	735	130.8	0.924	345.2	LEYDIG CELL TUMOR: TESTES ADENOMA: MAMMARY GLAND	11-M1-0035
0036	>	735	131.2	485.4	354.2	LEYDIG CELL TUMOR: TESTES	11-M1-0036
0037	>	735	124.7	437.7	313.0	LEYDIG CELL TUMOR: TESTES MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS ADENOMA: PITUITARY GLAND	11-M1-0037
0038	>-	735	116.7	8.084	364.1	LEYDIG CELL TUMOR: TESTES	11-M1-0038
0039	>-	736	128.3	454.4	326.1	LEYDIG CELL TUMOR: TESTES ADENOMA: PITUITARY GLAND	11-M1-0039
1) FATE: 2) DAYS:	Y XILLED ON S AFTER START OF	N SCHEDULE ; OF TREATMENT.	W XILLED	D IN EXTR	REMIS .		

APPENDIX 10-M1-6

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

. ; INDIVIDUAL MÁJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		STUDY NO. 83004	
ANIMAL	1) FATE	2)	4 Y008	WEIGHT (G)	SE OF	REFFERENCE	! .
NUMBER			INITIAL	FINAL	GAIN	MAJOR PATHOLOGICAL FINDINGS	\times	
0040	>-	736	116.8	486.9	370.1	CELL TU A: PITUI	11-M1-0040	!
0041	>-	736	112.3	438.6	326.3	LEYDIG CELL TUMOR: TESTES	11-M1-0041	
0042	>	736	113.7	484.3	370.6	LEYDIG CELL TUMOR: TESTES	11-M1-0042	
0043	3	701	124.8	435.3	310.5	TRANSITIONAL CELL CARCINOMA: KIDNEYS	11-M1-0043	
7700	×	581	118.7	411.5	292.8	ADENOMA: PITUITARY GLAND	11-M1-0044	
5700	>-	736	117.7	494.7	377.0	LEYDIG CELL TUMOR: TESTES	11-M1-0045	
0046	≻	736	105.2	459.2	354.0	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS LEYDIG CELL TUMOR: TESTES C-CELL ADENOMA: THYROID GLANDS	11-M1-0046	
2700	>	736	121.9	487.1	365.2	LEYDIG CELL TUMOR: TESTES	11-M1-0047	
0048	>-	736	118.8.	458.8	340.0	LEYDIG CELL TUMOR: TESTES	11-M1-0048	
6700	3	729	120.5	354.3	233.8	C-CELL ADENOMA: THYROID GLANDS NEUROBLASTOMA: ADRENAL GLANDS PHEOCHROMOCYTOMA: ADRENAL GLANDS ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES	. 11-M1-0049	

Y X KILLED ON SCHEDULE; W X KILLED IN EXTREMIS; X X FOUND DEAD.

AFTER START OF TREATMENT. 1) FATE : 2) DAYS :

APPENDIX 10-M1-7

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

STUDY NO. 83004

1			EDULE .	LED ON SCH	, , KILL	EXTREMIS ; F TREATMENT.	W KILLED IN AFTER START O	1) FATE : 2) DAYS :
	11-M1-0052	NO SIGNIFICANT LESION	243.7	365.9	122.2	347	В	0052
	11-M1-0051	LEYDIG CELL TUMOR: TESTES	300.3	418.5	118.2	736	> -	0051
	11-M1-0050	LEYDIG CELL TUMOR: TESTES FIBROMA: TONGUE	209.8	338.5	128.7	206	3	0020
. !	(APPENDIX NUMBER)	CAL FINDINGS	GAIN			! ! !	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	NUMBER
1 1 1	REFFERENCE	PROBABLE CAUSE OF DEATH	^ 5	WEIGHT (G)	BODY W	2)	1)	ANIMAL

APPENDIX 10-M2-8

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 10 PPM MALE

ANIMAL	1) FATE	2)	BODY	П	Q 0	PROBABLE CAUSE OF DEATH	40000 .08 .00 .00 .00 .00 .00 .00 .00 .00
NUMBER		 - -	INITIAL	FINAL	GAIN	OR OLOGICAL F	KETTEKENCE
0101	3	712	111.6	554.2	442.6	C-CELL ADENOMA: THYROID	. ATTENDIX NOMBER)
						GLANDS LEYDIG CELL TUMOR: TESTES FIBROSARCOMA: SKIN	1010
0102	>-	733	112.9	424.5	311.6		
0103	>	733	115.5	428.4	312.9		11-M2-0102
0104	>-	733	110.5	502.7	392.2		11-M2-0103
0105	3	665	125.7	302.5	176.8	FIBROMA: SKIN (SUBCUTIS)	11-M2-0104 11-M2-0105
0106	>-	733	119.7	7.757	334.7		
0107	>	733	115.9	482.9	367.0		11-M2-0106
0108	>-	733	118.7	449.1	330.4		11-M2-0107
0109	>	579	119.1	394.0	274.9	ADENOMA: PITUITARY GLAND SQUAMOUS CELL CARCINOMA	11-M2-0108 11-M2-0109
						: SKIN (SUBCUTIS) LEYDIG CELL TUMOR: TESTES	
0110	≥ .	721	129.2	504.8	375.6	ADENOCARCINOMA: JEJUNUM HEPATOCELLULAR ADENOMA : LIVER	11-M2-0110

1) FATE: W KILLED IN EXTREMIS; Y KILLED ON SCHEDULE.

APPENDIX 10-M2-9

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

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ANIMAL	1 1 1 1 1 1		1				4000 . NO. 10018
	FATE	DAYS	B007 V	WEIGHT (G >	PROBABLE CAUSE OF DEATH	REFERENCE
NUMBER		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	INITIAL	FINAL	GAIN	OK MAJOR PATHOLOGICAL FINDINGS	(APPENDIX NUMBER)
0111	>-	733	113.8	465.0	351.2		
0112	3	537	128.3	578.0	2.677	MALIGNANT FIBROUS HISTIO-	11-M2-0111
						CYTOMA: SKIN (SUBCUTIS) LEYDIG CELL TUMOR: TESTES	7110-2117
0113	>-	733	118.5	431.6	313.1		
0114	>	733	113.4	464.5	351.1		11-M2-0113
0115	W	711	119.9	383.2	263.3	PHEOCHROMOCYTOMA: ADRENAL	11-M2-0114
						GLANDS GANGLIONEUROMA: ADRENAL GLANDS LEYDIG CELL TUMOR: TESTES PAPILLARY ADENOMA : MAMMARY GLAND MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS ADENOMA: KIDNEYS	
0116	>-	734	111.1	452.5	341.4		*
0117	>	734	110.3	438.5	328.2		11-M2-0110
0118	3	519	110.4	407.8	297.4	HEMANGIOSARCOMA: SPLEEN LEYDIG CELL TUMOR: TESTES	11-M2-0118
0119	3		111.0	276.5	165.5	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS C-CELL ADENOMA: THYROID GLANDS	11-M2-0119
1) FATE: 2) DAYS:	· Y , KILLED O AFTER START	DU	W / KILLED	2	EXTREMIS .		

APPENDIX 10-M2-10

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

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	1)	2)		WEIGHT (c ٥	PROBABLE CAUSE OF DEATH	
NUMBER	r A - E	DAYS	INITIAL	FINAL	GAIN	08 CT 01	REFFERENCE
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			(APPENDIX NUMBER)
CCON 0119	(CONTINUED) 0119 W	269	111.0	276.5	165.5	ADENOMA: PITUITARY GLAND	11-M2-0119
0120	> -	734	117.1	410.2	293.1		
0121	>	734	115.0	7.494	c 672		11-M2-0120
0122	>	734	119.0	581.9	7.7.7		11-M2-0121
0123	3	715	,				11-M2-0122
		\ •	# • O + T •	4.58.5	. 522.1	C-CELL ADENOMA: THYROID GLANDS LEIOMYOSARCOMA: JEJUNUM ADENOMA: PITHITADAY CLAND	11-M2-0123
0124	>-	734	117.7	443.8	326.1		X - 77
0125	3	779	114.1	408.2	294.1	MESENCHYMOMA: SKIN	11-M2-0124
						(SUBCUTIS) PHEOCHROMOCYTOMA: ADRENAL GLANDS	
						ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES	
0126	3	636	118.0	319.1	201.1	MALIGNANT FIBROUS HISTIO- CYTOMA: SKIN (SUBCUTIS) LEYDIG CELL TUMOR: TESTES	11-M2-0126
0127	>-	734	121.2	486.2	365.0		20 20 10 10
0128	>-	734	114.5	455.0	340.5		11-M2-012/
0129	>	734	112.7	0.694	356.3		11-M2-0129

APPENDIX 10-M2-11

CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 10 PPM

MALE

ANIMAL	1)	5)	BODY	WEIGHT (~ 5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
NUMBER	FATE	DAYS	ı		1	PRUBABLE CAUSE OF DEATH OR	REFFERENCE
			INI I I A L	FINAL	GAIN	MAJOR PATHOLOGICAL FINDINGS	(APPENDIX NUMBER)
0130	>-	735	119.0	420.0	301.0		
0131	>-	735	114.5	2.607	295.2		11-M2-0130
0132	×	488	121.7	479.3	357.6	ADENOMA: BITHITABS	11-M2-0131
0133	3	613	116.4	378.1	261 7	MONOMINATION OF THE STAND	11-M2-0132
					• • • •	HONDONOCLEAR CELL LEUKEMIA : MULTIPLE ORGANS LEYDIG CELL TUMOR: TESTES ISLET-CELL ADENOMA : PANCREAS	11-M2-0133
0134	>-	735	107.7	475.1	367.4		71-M-11
0135	м	999	121.3	378.3	257.0	RHABDOMYOSARCOMA	11 14 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
			•			: SKN (SUBCUTIS) LEYDIG CELL TUMOR: TESTES	11-M2-0135
0136	×	438	122.4	453.3	330.9		
0137	>-	735	108.1	422.1	314.0		11-M2-0136
0138	>	735	119.4	475.5	356.1		11-M2-0137
0139	3	396	119.9	344.2	224.3	MONONUCLEAR CFII I FIIKEMIA	11-M2-0138
						: MULTIPLE ORGANS ADENOMA: PITUITARY GLAND	11-M2-0139
0140	>-	735	122.2	486.5	364.3		M - 11
0141	>-	735	117.3	472.0	354.7		11-M2-0141
FATE:	Y × KILLED ON S	N SCHEDULE;	X FOUND	DEAD ;			

10-M2-12 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

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NUMBER		2 1	INITIAL	FINAL	GAIN	OR MAJOR PATHOLOGICAL FINDINGS	(APPENDIX NUMBER)
		ľ	1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
0142	>	735	112.8	425.6	312.8		11-M2-0142
0143	>	736	127.9	789.6	361.7		11-M2-0143
0144	>	736	128.8	467.1	338.3		1
0145	>-	736	132.0	451.3	319.3		11-M2-0144
0146	×	779	121.2	7.074	349.2	LEYDIG CELL TUMOR: TESTES	11-M2-0145
0147	>-	736	115.4	0.977	330.6		11-M2-0140
0148	>	736	110.0	425.1	315.1		11-M2-014/
0149	>-	736	112.1	444.1	332.0		11-M2-0148
0150	3	700	7				6410-2H-11
	:) } 0	134.0	38 4. 6	252.6	MONOUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS KERATOACANTHOMA: SKIN MESOTHELIOMA: PERITONEUM LEYDIG CELL TUMOR: TESTES ADENOMA: PITUITARY GLAND	11-M2-0150
0151	>-	736	123.5	434.9	311.4		11-M2-0151
0152	>	736	114.5	460.2	345.7		11-M2-0152

10-M3-13 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

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SEX :
AND
LEVEL

			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 			STUDY NO. 83004
ANIMAL	1) FATE	2)	BODY W	WEIGHT (^	PROBABLE CAUSE OF DEATH	REFERENCE
NUMBER			INITIAL	FINAL	GAIN	OR MAJOR PATHOLOGICAL FINDINGS	(APPENDIX NUMBER)
0201	>-	733	113.9	370.6	256.7	1	
0202	>	7.33	118.7	465.5	346.8		11 H3 0201 11-M3-0202
0203	×	246	124.3	7.897	344.1	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS LEYDIG CELL TUMOR: TESTES	11-M3-0203
020	Μ	631	117.2	730.8	613.6	FIBROADENOMA: MAMMARY GLAND	11-M3-0204
						MESOTHELIOMA: PERITONEUM LEYDIG CELL TUMOR: TESTES	
0205	>-	733	117.7	417.1	599.4		11-M3-0205
0206	>-	733	126.2	462.7	336.5		11-M3-0206
0207	> -	733	122.8	459.8	337.0		11-M3-0207
0208	>	733	116.0	456.2	340.2		11-M3-0208
0200	>	733	126.5	452.9	326.4	,	11-M3-0209
0210	>	733	113.5	415.5	302.0		11-M3-0210
0211	≻	733	112.1	440.7	328.6		11-M3-0211
0212	>	734	120.9	6.877	328.0		11-M3-0212
0213	>-	734	.120.3	478.3	, 358.0		11-M3-0213
1) FATE: 2) DAYS:	Y KILLED ON SCHEDULE;	N SCHEDULE ; OF TREATMENT.	X FOUND	DEAD ;	W XILLED	O IN EXTREMIS .	

APPENDIX 10-M3-14

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 100 PPM MALE

STUDY NO. 83004	REFFERENCE	(APPENDIX NUMBER)	11-M3-0214	11-M3-0215	11-M3-0216	11-M3-0217	11-M3-0218	11-M3-0219	11-M3-0220	11-M3-0221	11-M3-0222	11-M3-0223	11-M3-0224	11-M3-0225	11-M3-0226	11-M3-0227	11-M3-0228
	-	MAJOR PATHOLOGICAL FINDINGS							MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS LEYDIG CELL TUMOR: TESTES	FIBROSARCOMA: PERITONEUM		MESENCHYMOMA: KIDNEYS					
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6)	н I	319.3	332.1	310.7	315.4	337.0	395.5	341.1	263.0	367.6	289.2	331.4	252.8	334.1	334.3	366.8
1 1 1 1 1 1 1 1 1	Y WEIGHT (FINAL	437.7	439.9	434.9	431.5	7.777	514.6	455.4	376.3	9.825	404.3	438.9	363.9	449.3	449.5	7.787
	BODY WE	INITIAL	118.4	107.8	124.2	116.1	107.4	119.1	114.3	113.3	111.0	115.1	107.5	111.1	115.2	115.2	117.6
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2) DAYS		734	734	734	734	734	734	543	641	734	463	735	735	735	735	735
	1) FATE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	>-	>-	≻ .	>-	> -	>-	×	×	>-	M	>-	>-	>-	>-	>-
	ANIMAL	NUMBER	0214	0215	0216	0217	0218	0219		0221	0222	0223	0224	0225	0226	0227	0228

Y . KILLED ON SCHEDULE : X . FOUND DEAD ; W . KILLED IN EXTREMIS AFTER START OF TREATMENT. 1) FATE: 2) DAYS:

APPENDIX 10-M3-15

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

*LEVEL AND SEX : 100 PPM MALE

NUMBER 0229 Y 0230 Y 0231 Y 0232 Y	DAYS DAYS 735	BODY V	EIGHT (· · · · · · · · · · · · · · · · · · ·	PROBABLE CAUSE OF DEATH	
	735	INITIAL	T N V			105111
	735		- 1 2 7 1	GAIN	MAJOR PATHOLOGICAL FINDINGS	(APPENDIX NUMBER)
		107.7	437.4	329.7		11-M3-0220
	735	120.0	7.777	324.4		11-M3-0230
	735	129.3	480.8	351.5		11 H3 O230
0233 Y	735	114.3	520.9	9.904		11-M3-0231
1	735	119.2	394.7	275.5		11-M3-0233
0234 Y	735	127.8	475.9	348.1		11-M3-0235
0235 Y	735	127.7	472.4	344.7		11-M3-0235
0236 Y	736	120.0	482.2	362.2		11-M3-0236
0237 Y	736	107.2	348.4	241.2	·	11-M3-0237
0238 Y	736	123.9	9.094	336.7		11-M3-0238
0239 Y	736	113.7	486.3	372.6		11-M3-0239
0240 Y	736	110.3	429.6	319.3		11-M3-0260
0241 Y	736	112.8	470.5	357.7		11-M3-0241
0242 X	473	115.5	451.4	335.9	LIPOSARCOMA: PERITONEUM	11-M3-0242
0243 Y	736	121.7	464.5	342.8		11-M3-0243
0244 W	769	111.2	399.5	288.3	C-CELL ADENOMA: THYROID GLANDS	11-M3-0244

X , FOUND DEAD .

W . KILLED IN EXTREMIS : Y . KILLED ON SCHEDULE ; AFTER START OF TREATMENT.

1) FATE: 2) DAYS:

APPENDIX 10-M3-16

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 100 PPM MALE

MINURED Major MININGE Major MININGE Major			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		STUDY NO. 83004
MITHUED) W 694 111.2 399.5 288.3 LEVDIG CELL TUNDR: TESTES MONDHOLELRE CELL LEWERIA "MONDHOLE ORGANS "MULTIPLE ORGANS "STAN	ANIMAL	1) FATE	2) DAYS	٦٠.	VEIGHT (^ !	CAUSE OF DEA	REFFERENCE
Page	NUMBER	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		INITIAL	FINAL	GAIN	MAJOR PATHOLOGICAL FINDINGS	NUMBE
M 671 120.4 352.3 231.9 ADENOMA: TESTES HEYDIC CELL LEUKENIA HULTIPLE ORGANS HULTIPLE ORGANS HULTIPLE ORGANS HULTIPLE ORGANS HULTIPLE ORGANS STAIN SYIN STAIN STAI	CCONT		Ç				; ; ; ; ;	
W 671 120.4 352.3 231.9 ADENOMA: PITUITARY GLAND SQUAMOUS CELL CARCINOMA : SKIN	7 4 7 0		769	111.2	399.5	288.3	LEYDIG CELL TUMOR: TESTES MONONUCLEAR CELL LEUKENIA : MULTIPLE ORGANS	11-M3-0244
Y 736 113.6 450.6 337.0 W 540 121.9 586.5 464.6 LEVDIG CELL TUMOR: TESTES FIBROSARCOMA: SKIN (SUBCUTIS) X 705 132.1 415.5 283.4 MONONUCLEAR CELL LEUKEMIA SOUAMOUS CELL CARCINOMA OF A CANTY LEVDIG CELL TUMOR: TESTES SOUAMOUS CELL CARCINOMA OF A CANTY LEVDIG CELL TUMOR: TESTES SOAMOUS CELL TUMOR: TESTES SOAMOUS CELL TUMOR: TESTES SOAMOUS CELL TUMOR: ADBENAL SKIN PHEOCHROMOCYTOMA: ADBENAL GLANDS Y 736 114.6 415.4 300.8 FHEOCHROMOCYTOMA: ADBENAL GLANDS Y 736 121.0 491.3 370.3	0245	3	671	120.4	352.3	231.9	ADENOMA: PITUITARY GLAND SQUAMOUS CELL CARCINOMA . CYIN	11-M3-0245
Y 736 113.6 450.6 337.0 W 540 121.9 586.5 464.6 LEYDIG CELL TUMOR: TESTES FIBROSARCOMA: SKIN (SUBCUTIS) X 705 132.1 415.5 283.4 MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS SQUAMOUS CELL CARCINOMA : ORAL CAVITY LEYDIG CELL TUMOR: TESTES SQUAMOUS CELL PAPILLOMA : SKIN PHEOCHROMOCYTOMA: ADRENAL GLANDS Y 736 114.6 415.4 300.8 PHEOCHROMOCYTOMA: ADRENAL GLANDS Y 736 121.0 491.3 370.3							PHEOCHROMOCYTOMA: ADRENAL GLANDS	
W 540 121.9 586.5 464.6 LEYDIG CELL TUMOR: TESTES FIBROSARCOMA: SKIN (SUBCUTIS) X 705 132.1 415.5 283.4 MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS SQUAMOUS CELL CARCINOMA : ORAL CAVITY LEYDIG CELL LUMOR: TESTES SQAMOUS CELL PAPILLOMA : SKIN FROCHROMOCYTOMA: ADRENAL GLANDS Y 736 114.6 415.4 300.8 PHEOCHROMOCYTOMA: ADRENAL GLANDS Y 736 121.0 491.3 370.3	0246	> -	736	113.6	450.6	337.0		11-M3-0246
X 705 132.1 415.5 283.4 MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS SQUAMOUS CELL CARCINOMA : ORAL CAVITY LEYDIG CELL TUMOR: TESTES SQAMOUS CELL PAPILLOMA : SKIN PHEOCHROMOCYTOMA: ADRENAL GLANDS	0247	3	240	121.9	586.5	464.6		11-M3-0247
TEYDIG CELL TUMOR: TESTES SQANOUS CELL PAPILLOMA : SKIN SKIN SKIN PHEOCHROMOCYTOMA: ADRENAL GLANDS 121.0 491.3 370.3 108.9 445.4 336.5	0248	×	705	132.1		283.4	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS SQUAMOUS CELL CARCINOMA	11-M3-0248
PHEOCHROMOCYTOMA: ADRENAL GLANDS Y 736 114.6 415.4 300.8 Y 736 121.0 491.3 370.3 Y 736 108.9 445.4 336.5							LEYDIG CELL TUMOR: TESTES SQAMOUS CELL PAPILLOMA : SKIN	
Y 736 114.6 415.4 300.8 Y 736 121.0 491.3 370.3 Y 736 108.9 445.4 336.5							PHEOCHROMOCYTOMA: ADRENAL GLANDS	
Y 736 121.0 491.3 370.3 Y 736 108.9 445.4 336.5	0249	>-	736	114.6	415.4	300.8		11-M3-0249
Y 736 108.9 445.4 336.5	0250	≻	736	121.0	491.3	370.3		11-M3-0250
	0251	>	736	108.9	445.4	336.5		11-M3-0251

APPENDIX 10-M3-17

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 100 PPM M/

	1 1 1 1 1 1 1 1 1 1						CALLO ON VOLLE
ANIMAL	1)	2)	B00Y	ιш		PROBABLE CAUSE OF DEATH	40000 .ON
NUMBER		0	INITIAL	FINAL		008	אחיר האהא היר האהא כי ה
1		1			NT 45	TOUR CAPPENDIX NUMBER)	(APPENDIX NUMBER)
0252	>	736	116 7	2 647	C L L		
				8.666 6.574	8.555		11-M3-0252
1) FATE: 2) DAYS:	Y X KILLED ON AFTFR START O	SCHEDULE .	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	: : : : :		1	

APPENDIX 10-M4-18

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

ANIMAL	1)	2)	70	VEIGHT (G)	PROBABLE CAUSE OF DEATH	REFFERENCE
NUMBER		DA 10	INITIAL	FINAL	GAIN	OR MAJOR PATHOLOGICAL FINDINGS	(ÁPPENDIX NUMBER)
0301	>	733	109.4	435.1	325.7	C-CELL ADENOMA: THYROID GLANDS LEYDIG CELL TUMOR: TESTES	1
0302	> -	733	121.4	446.1	324.7	MESOTHELIOMA: PERITONEUM LEYDIG CELL TUMOR: TESTES	11-M4-0302
0303	>	733	105.0	481.0	376.0	LEYDIG CELL TUMOR: TESTES C-CELL ADENOMA: THYROID GLANDS MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS	11-M4-0303
0304	>-	733	122.7	453.1	330.4	LEYDIG CELL TUMOR: TESTES	11-M4-0304
0305	> -	733	113.4	495.4	379.0	FIBROSARCOMA: SKIN (SUBCUTIS) LEYDIG CELL TUMOR: TESTES	11-M4-0305
0306	>	733	122.2	473.3	351.1	FIBROADENOCARCINOMA : MAMMARY GLAND LEYDIG CELL TUMOR: TESTES	11-M4-0306
0307	3	069	122.5	398.4	275.9	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS HEMORRHAGE: BRAIN FIBROSARCOMA: SKIN (SUBCUTIS) LEYDIG CELL TUMOR: TESTES	11-M4-0307
0308	>-	733	128.6	8.697	341.2	LEYDIG CELL TUMOR: TESTES	11-M4-0308

1) FATE: Y KILLED ON SCHEDULE; W KILLED IN EXTREMIS
2) DAYS: AFTER START OF TREATMENT.

APPENDIX 10-M4-19

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

NUMBER	3 L V 1) o v	ВОВУ	WEIGHT (9	PROBABLE CAUSE OF DEATH	A P P P P P P P P P P P P P P P P P P P
	- I	0	ITIA	FINAL	GAIN	OR MAJOR PATHOLOGICAL FINDINGS	1 02
6020	М	574	107.9	370.1	262.2	ASTROCYTOMA	
0310	>-	733	112.8	486.9	374.1	ADENOMA: PITUITARY GLAND LEYDIG CFII TIMOR: TESTES	11-M4-0310
0311	3	720	119.7	405.9	283.2		11-M4-0311
0312	3	559	119.4	482.8	363.4	SEBACEOUS SQUAMOUS CELL CARCINOMA: SKIN LEYDIG CELL TUMOR: TESTES ADENOMA: PITUITARY GLAND	11-M4-0312
0313	>	733	118.9	437.3	318.4	ISLET-CELL ADENOMA : PANCREAS EXOCRINE ADENOMA : PANCREAS PHEOCHROMOCYTOMA: ADRENAL GLANDS LEYDIG CELL TUMOR: TESTES	11-M4-0313
0314	>	734	124.7	441.9	317.2	ADENOMA: PITUITARY GLAND PHEOCHROMOCYTOMA: ADRENAL GLANDS LIPOSARCOMA: SKIN (SUBCUITIS) LEYDIG CELL TUMOR: TESTES	11-M4-0314
0315	>-	734	120.4	7.88.0	377.6	PAPILLARY ADENOCARCINOMA . : LUNG	11-M4-0315

APPENDIX 10-M4-20

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

ANIMAL	1) FATE	2)		WEIGHT (PROBABLE CAUSE OF DEATH	REFFERENCE
NUMBER) () () () () ()	INITIAL	FINAL	GAIN	OR MAJOR PATHOLOGICAL FINDINGS	(APPENDIX NUMBER
(CONTINUED)					 		
0315	> -	734	120.4	7.88.0	377.6	ADENOMA: PITUITARY GLAND C-CELL ADENOMA: THYROID GLANDS	11-M4-0315
0316	>-	734	125.4	507.1	381.7	<pre>ISLET-CELL ADENOMA : PANCREAS FIBROMA: SKIN (SUBCUTIS) LEYDIG CELL TUMOR: TESTES</pre>	11-M4-0316
0317	> -	734	125.3	486.3	361.0	LIPOMA: SKIN (SUBCUTIS) LEYDIG CELL TUMOR: TESTES	11-M4-0317
0318	м	610	111.5	8.627	368.3	MESOTHELIOMA: PERITONEUM LEYDIG CELL TUMOR: TESTES	11-M4-0318
0319	×	206	111.6	339.5	227.9	ADENOMA: PITUITARY GLAND	11-M4-0319
0320	> -	734	111.7	7.897	356.7	<pre>ISLET-CELL ADENOMA : PANCREAS LEYDIG CELL TUMOR: TESTES</pre>	11-M4-0320
0321	3	711	121.2	355.9	234.7	ADENOMA: PITUITARY GLAND	11-M4-0321
0322	3	588	119.5	408.8	289.3	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS	11-M4-0322
0323	3	289	120.7	391.3	270.6	LEYDIG CELL TUMOR: TESTES	11-M4-0323
0324	×	344	115.9	363.4	247.5	MALIGNANT FIBROUS HISTIO- CYTOMA: PIFHRA	11-M4-0324

Y , KILLED ON SCHEDULE ; W , KILLED <u>IN EXTREMIS</u> ; X , FOUND DEAD . 1) FATE : 2) DAYS :

APPENDIX 10-M4-21

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 	 1 1 1 1 1		DY NO. 8
ANIMAL	1)	2 2 2 4 2	BODY W	EIGHT (ROBABLE CAUSE OF DEATH	REFFERENCE
NUMBER	- 1		INITIAL		GAIN	2	(APPEND
0325	3	769	102.8	382.7	279.9	NONUCLEAR CELL LEUKEM MULTIPLE ORGANS YDIG CELL TUMOR: TEST	11-M4-0325
0326	>-	734	117.4	7.627	362.0	LEYDIG CELL TUMOR: TESTES	11-M4-0326
0327	>-	734	123.0	4.064	327.4	PAPILLARY ADENOMA: LUNG LEYDIG CELL TUMOR: TESTES	11-M4-0327
0328	> .	734 .	129.2	472.7	343.5	LEYDIG CELL TUMOR: TESTES PAPILLARY ADENOMA: LUNG	11-M4-0328
0329	3	713	119.6	406.9	287.3	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS C-CELL ADENOMA: THYROID GLANDS ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES	11-M4-0329
0330	>	734	117.8	461.7	343.9	PAPILLARY ADENOMA: LUNG ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES	11-M4-0330
0331	>	735	119.2	504.1	384.9	ADENOMA: PITUITARY GLAND	11-M4-0331
0332	В	659	121.6	406.5	284.9	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES	11-M4-0332
0333	> -	735	117.8	502.8	385.0	ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES	11-M4-0333

1) FATE: W , KILLED IN EXTREMIS; Y , KILLED ON SCHEDULE. 2) DAYS: AFTER START OF TREATMENT.

APPENDIX 10-M4-22

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

. , INDIVIDUAL MĄJOR PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

1	7 H	/2	_	-	۰ و	PROBABLE CAUSE OF DEATH	REFERENCE
	TA-E	DAYS				80	
NUMBER		1 1 1 1 1 1 1	INITIAL	FINAL	GAIN	MAJOR PATHOLOGICAL FINDINGS	(APPENDIX NUMBER)
0334	×	649	114.8	386.8	272.0	ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES	-W4-03
0335	>-	735	118.6	464.8	346.2	LEYDIG CELL TUMOR: TESTES	11-M4-0335
0336	>-	735	117.7	443.1	325.4	FIBROMA: SKIN (SUBCUTIS) LEYDIG CELL TUMOR: TESTES	11-M4-0336
0337	> -	735	119.8	477.5	357.7	PAPILLARY ADENOMA: LUNG PHEOCHROMOCYTOMA: ADRENAL GLANDS	11-M4-0337
						NECROSIS: ADRENAL GLANDS ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES	
0338	>	735	114.7	487.7	373.0	C-CELL ADENOMA: THYROID GLANDS LEYDIG CELL TUMOR: TESTES	11-M4-0338
0339	3	712	112.9	377.4	264.5	LEYDIG CELL TUMOR: TESTES	11-M4-0339
0340	>-	735	115.4	500.8	385.4	PAPILLARY ADENOMA: LUNG LEYDIG CELL TUMOR: TESTES	11-M4-0340
0341	>	735	115.3	483.8	368.5	ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES	11-M4-0341
0342	>-	736	114.0	2.667	385.7	LEYDIG CELL TUMOR: TESTES	11-M4-0342
0343	> -	736	110.1	6.464	384.8	LEYDIG CELL TUMOR: TESTES HAMARTOMA: MAMNARY GLAND	11-M4-0343

10-M4-23 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL MAJOR PATHOLOGICAL FINDINGS

			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		STUDY NO. 83004
ANIMAL	1) FATE	2) DAYS	BODY W	EIGHT (G)	PROBABLE CAUSE OF DEATH	REFFERENCE
NUMBER	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		INITIAL	FINAL	GAIN	MAJOR PATHOLOGICAL FINDINGS	(APPENDIX NUMBER)
0344	>	736	114.2	483.3	369.1	LEYDIG CELL TUMOR: TESTES FIBROMA: SKIN (SUBCUTIS)	11-M4-0344
0345	>	736	121.7	472.2	350.5	LEYDIG CELL TUMOR: TESTES	11-M4-0345
0346	>-	736	121.0	480.0	359.0	PAPILLARY ADENOMA: LUNG LEYDIG CELL TUMOR: TESTES	11-M4-0346
0347	>	736	118.2	7.897	350.2	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES	11-M4-0347
0348	>-	736	106.3	455.8	349.5	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS LEYDIG CELL TUMOR: TESTES	11-M4-0348
0349	3	729	114.9	357.1	242.2	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS NECROSIS: ADRENAL GLANDS NECROSIS: TESTES	11-M4-0349
0350	× .	728	114.5	417.2	302.7	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS ADENOMA: PITUITARY GLAND	11-M4-0350
0351	>-	736	120.4	450.0	329.6	PHEOCHROMOCYTOMA: ADRENAL GLANDS LEYDIG CELL TUMOR: TESTES	11-M4-0351
0352	×	711	109.5	411.3	301.8	ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES	11-M4-0352
1) FATE : 2) DAYS :	Y X KILLED O AFTER START	ON SCHEDULE ;	M / KILL!	LLED IN EXT	EXTREMIS : X		

APPENDIX 11-M1-0001

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

STUDY NO. 83004

THYMUS SPLEEN NASAL CAVITY LARYNGOPHARYNX TRACHEA LUNG SUBLINGUAL GLANDS LIVER	H FI B H RE E K R I N F T	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS INFILTRATION OF LEUCOCYTES CYSTIC DILATATION OF GLAND	+ + + + +	LEYDIG CELL TUMOR: TESTES
SPLEEN NASAL CAVITY LARYNGOPHARYNX TRACHEA LUNG SUBLINGUAL GLANDS	HEHRER IN XTM	'ERPLASIA OF EPITHELIAL STICULUM CELLS TOSIDEROSIS RAMEDULLARY HEMATOPOIESIS STIC DILATATION OF GLAND	+ ++ + +	
SPLEEN NASAL CAVITY LARYNGOPHARYNX TRACHEA LUNG SUBLINGUAL GLANDS LIVER	HEM EXT INF	RAMEDULLARY HEMATOPOIESIS ILTRATION OF LEUCOCYTES STIC DILATATION OF GLAND	+ + + +	
NASAL CAVITY LARYNGOPHARYNX TRACHEA LUNG SUBLINGUAL GLANDS LIVER	INF	ILTRATION OF LEUCOCYTES TIC DILATATION OF GLAND	+ +	
LARYNGOPHARYNX TRACHEA LUNG SUBLINGUAL GLANDS LIVER	CYS	TIC DILATATION OF GLAND	+	
TRACHEA LUNG SUBLINGUAL GLANDS LIVER				
LUNG SUBLINGUAL GLANDS LIVER	CYS	CYSTIC DILATATION OF GLAND	+	
SUBLINGUAL GLANDS LIVER	CAL	CALCIFICATION OF VASCULAR WALL	+	
LIVER	INF (B	INFILTRATION OF LEUCOCYTES (BILATERAL)	+	
	FAT PRO WI INF	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES FOCAL ATROPHY OF HEPATIC CELLS	+ + + +	
PANCREAS	ATR	ATROPHY OF PANCREATIC ACINUS FIBROSIS	+ + + +	
KIDNEYS	CHR	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	

3) GRADE OF MASS:	A . SMALL AND/OR SINGULAR	B , MEDIAL AND/OR SPORADIC	C . LARGE AND/OR MULTIPLE
2) GRADE : NEGATIVE NOT PRESENTED	+ \ SLIGHT	++ / MODERATE	+++ / SEVERE
1) FATE : Y / KILLED ON SCHEDULE			4) DAYS : AFTER START OF TREATMENT

CONTINUED APPENDIX 11-M1-0001 CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL, STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

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ANIMAL 1) 4) NUMBER	4))AYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0001 Y 7	733	KIDNEYS			PIGMENTATION (BILATERAL) CALCIFICATION (UNILATERAL)	+ + +	
		TESTES	ENLARGEMENT (UNILATERAL) ATROPHY	+ +	LEYDIG CELL TUMOR (BILATERAL)		
			(UNILATERAL) NODULE (BILATERAL)	+ + +			
		PROSTATIC GLAND	NODULE	+ + +	INFLAMMATION	+ +	
		SEMINAL VESICLE	ATROPHY . ,	++++			
		PITUITARY GLAND	HEMORRHAGE	+	MIGRATION OF HEMOSIDERIN-LADEN CELLS	+	
		EYE BALLS	GRAYISH CHANGE (UNILATERAL)	+ + +	CATARACT (UNILATERAL) CALCIFICATION, SCLERA (UNILATERAL)	+ + + + +	
		HARDERIAN GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	

4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

3) GRADE OF MASS:
A , SMALL AND/OR SINGULAR
B , MEDIAL AND/OR SPORADIC
C , LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1	! ! ! !			! ! ! ! !		; ; ; ; ;	STUDY NO. 83004
ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	ROBAI DEATI
0002	, > -	733	MULTIPLE ORGANS			MONONUCLEAR CELL LEUKEMIA		MONONUCLEAR CELL LEUKEMIA
			HEART			FIBROSIS	+	: MULTIPLE ORGANS KERATOACANTHOMA: SKIN
			SPLEEN	ENLARGEMENT	+ + +	CONGESTION	+ + +	LEYDIG CELL TUMOR: TESTES
			BONE MARROW			OSTEOGENESIS ACTIVATION OF HEMATOPOIESIS	+ +	
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+ +	
			LUNG			CALCIFICATION OF VASCULAR WALL	+	
			LIVER	ENLARGEMENT	+ + +	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS FOCAL ATROPHY OF HEPATIC CELLS INFILTRATION OF LEUCOCYTES GRANULATION	+ + + + + v	
			PANCREAS			ATROPHY OF PANCREATIC ACINUS FIBROSIS	+ +	
			KIDNEYS	· ·		CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ ++	
			TESTES	NODULE (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
1) [FATE:	. Y .	Y / KILLED ON SCHEDULE AFTER START OF TREATMENT	Z) GRADE	NEGATIVE NOT + SLIGHT ++ MODERATE +++ SEVERE	PRESENTED 3) GRADE B	OF MASS: SMALL AND/OR MEDIAL AND/OR LARGE AND/OR	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

3) GRADE OF MASS:	A , SMALL AND/OR SINGULAR	B , MEDIAL AND/OR SPORADIC	C . LARGE AND/OR MULTIPLE
2) GRADE : NEGATIVE NOT PRESENTED	· + · SLIGHT	++ / MODERATE	+++ / SEVERE
1) FATE : Y , KILLED ON SCHEDULE			4) DAYS : AFTER START OF TREATMENT

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT CONTINUED 11-M1-0002 APPENDIX

INDIVIDUAL PATHOLOGICAL FINDINGS

1 1 1	!	1 1					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUD.Y NO. 83004
ANIMAL 1) 4) NUMBER	1) FATE	1	ORGAN	GROSS PATHOLO FIND	2)3) GRADE	GICAL 2)3) HISTOPATHOLOGICAL INGS GRADE FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0005	>-	733	PROSTATIC GLAND			INFLAMMATION	+	
			SEMINAL VESICLE ATROPHY	ATROPHY	+ + +	ATROPHY	+	
			SKIN	MASS	ш	KERATOACANTHOMA		
			BRAIN			PIGMENTATION	+	
٠			SPINAL CORD			PIGMENTATION	+	

11-M1-0003 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

			1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 12 4) NUMBER	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0003 Y 733	HEART			FIBROSIS	; ; ; ; ; ;	
	SPLEEN	ENLARGEMENT	+	HEMOSIDEROSIS CONGESTION	- + +	
	NASAL CAVITY			INFILTRATION OF LEUCOCYTES	- 4	
	LARYNGOPHARYNX			CYSTIC DILATATION OF GLAND	- 4	
	TRACHEA			CYSTIC DILATATION OF GLAND	+	
	LUNG			CALCIFICATION OF VASCULAR WALL	+	
	SUBLINGUAL GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
	LIVER			FATTY DEGENERATION OF HEPATIC CELLS GRANULATION PROLIFERATION PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + 8 	
	KIDNEYS		OHI	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (UNILATERAL) PIGMENTATION (UNILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)		
	TESTES		+	EYDIG CELL TUMOR (UNILATERAL)		
1) FATE: Y .	ON SCHED	2) GRADE	NEGATIVE NOT + SLIGHT ++ MODERATE		GRADE OF MASS: A \ SMALL AND/OR B \ MEDIAL AND/OR	: : /OR SINGULAR D/OR SPORADIC
	TABAL OF TABAL		+++ , SEVE		LARGE AND	LARGE AND/OR MULTIPLE

CONTINUED	
11-M1-0003	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

STUDY NO. 83004	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS				
	2) GRADE			+	+
STUDY NO. 83004	HISTOPATHOLOGICAL FINDINGS			PIGMENTATION	PIGMENTATION
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2)3) GRADE		+ + +	a.	۵
	ORGAN GROSS PATHOLOGICAL FINDINGS		NODULE (UNILATERAL)		
	 	TESTES		BRAIN	SPINAL CORD
1 1 1	1	733			
1	1) FATE	>			
1	ANIMAL 1) 4) NUMBER DAYS	0003			

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

3) GRADE OF MASS:
A / SMALL AND/OR SINGULAR
B / MEDIAL AND/OR SPORADIC
C / LARGE AND/OR MULTIPLE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y / KILLED ON SCHEDULE

APPENDIX 11-M1-0004

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : O PPM MALE

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1	. !			 		; ; ; ;	STUDY NO. 83004
ANIMAL F, NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HZ !	2) GRADE	ROBABLE CAUSE DEATH OR MAJOR LOGICAL FINDINGS
0004	>-	733	HEART			FIBROSIS	,+	LEYDIG CELL TUMOR: TESTES
			THYMUS		-	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
			SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
			BONE MARROW		C	OSTEOGENESIS	+	
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
			LARYNGOPHARYNX		C	CYSTIC DILATATION OF GLAND	+	
			TRACHEA		J	CYSTIC DILATATION OF GLAND	+	
			LUNG		Ü	CALCIFICATION OF VASCULAR WALL	+	
			LIVER			FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES SMALL GRANULOMA	+ + + + + v	
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) CALCIFICATION (UNILATERAL)	+ ++	
			TESTES	ATROPHY (UNILATERAL)	+	LEYDIG CELL TUMOR (BILATERAL)		

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM

MALE

1 1 1 1	1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		 			STUDY NO. 83004
ANIMAL 1) 4)	1	(7	ORGAN	GROSS PATHOLOGICAL	2)3)	HISTOPATHOLOGICAL		PROBABLE CALLSE
NUMBER	т Д —	DAYS		FINDINGS	GRADE	FINDINGS	GRADE	OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
7000	>	733		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
)) .) 1 -) 1	ENLARGEMENT	+			
				(ONICATERAL) NODULE (BILATERAL)	+ + +			
			PROSTATIC GLAND			INFLAMMATION	+	
			SEMINAL VESICLE	ATROPHY	++++	ATROPHY	+	
			ADRENAL GLANDS			PIGMENTATION (UNILATERAL)	, -1-	
			HARDERIAN GLANDS		•	INFILTRATION OF LEUCOCYTES (BILATERAL)	+	
			BRAIN			PIGMENTATION	+	
			SPINAL CORD		<u>u</u>	PIGMENTATION	+	

1) FATE : Y . KILLED ON SCHEDULE 2) GRADE : NEGATI + . SL

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

NOT PRESENTED 3) GRADE OF MASS:

A . SMALL AND/OR SINGULAR:

ATE B . MEDIAL AND/OR SPORADIC

C . LARGE AND/OR MULTIPLE

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3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

11-M1-0005 APPENDIX CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1	1			1 1 1 1		STUDY NO. 83004
ANIMAL 1) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	STOPATHOLOGICAL	2) PROBABLE CAUSE GRADE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
۷ 5000	733	MULTIPLE ORGANS			LL LEUKE	LEYDIG CELL TUMOR: TESTES
		PERITONEUM	NODULE	+ + +	MESOTHELIOMA	
		HEART			FIBROSIS MIGRATION OF HEMOSIDERIN-LADEN CELLS	MESOTHELIOMA: PERITONEUM ++ +
		SPLEEN	ENLARGEMENT	+ + +	CONGESTION FIBROSIS CAPSULITIS	+ + + + +
		BONE MARROW			OSTEOGENESIS ACTIVATION OF HEMATOPOIESIS	+ + +
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+
		LUNG			CALCIFICATION OF VASCULAR WALL	+
		LIVER	ROUGHNESS OF SURFACE ENLARGEMENT	+ + + +	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT	. + + +
					WITH FIBRUSIS FOCAL ATROPHY OF HEPATIC CELLS GRANULATION ANGIECTASIA	+ + +
		PANCREAS			ATROPHY OF PANCREATIC ACINUS	+
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE 1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

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INDIVIDUAL PATHOLOGICAL FINDINGS

O PPM LEVEL AND SEX :

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1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1	1		1				STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS	1) ATE D	4))AYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
NOMBER	! ! ! !	1 1 1 1 1 1			! ! ! ! ! !			PATHOLOGICAL FINDINGS
0005	\ \	733	KIDNEYS					; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
			TESTES	NODULE (BILATERAL)	+ +	LEYDIG CELL TUMOR (BILATERAL)		
			PROSTATIC GLAND			АТКОРНУ	+	
			SEMINAL VESICLE			ATROPHY	+	
			BRAIN			PIGMENTATION	+	
			SPINAL CORD			PIGMENTATION	+	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1						STUDY .NO. 83004
ANIMAL 1) NUMBER FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	<u> </u>	GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
y 9000	733	HEART			FIBROSIS MIGRATION OF HEMOSIDERIN-LADEN CELLS	! ! ! ! ! ! ! ! !	LEYDIG CELL TUMOR: TESTES
		SPLEEN			HEMOSIDEROSIS CONGESTION	+ +	
		BONE MARROW			OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		FUNG		4.4	ADENOMATOSIS ALVEOLAR BRONCHITIS	+ +	
		PAROTID GLANDS		7	INFILTRATION OF LEUCOCYTES (BILATERAL)	+	
		LIVER		TEST I	FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + +	
		PANCREAS		A	ATROPHY OF PANCREATIC ACINUS	++	
		KIDNEYS		U	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , NODERATE
+++ , SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

CONTINUED 11-M1-0006 APPENDIX

CHRONIC AND CARCINDGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

: : : : : : : : : : : : : : : : : : : :	1 1 1	1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER FATE DAYS	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
9000	>	733	KIDNEYS] 		: 	
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
			TESTES	ENLARGEMENT (UNILATERAL)	+	LEYDIG CELL TUMOR (BILATERAL)		
				NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE	АТВОРНҮ	+ + +	АТКОРНУ	+	
			BRAIN			PIGMENTATION	+	
			SPINAL CORD			PIGMENTATION	+	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

11-M1-0007 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

1 1 1	; ; ; ;	 	; ; ; ; ; ; ; ;		; ; ; ; ;		! ! ! ! !	STUDY NO. 83004
ANIMAL F NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
2000	3	721	HEART		_	FIBROSIS	+	ADENOMA: PITUITARY GLAND
			THYMUS		-	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
			SPLEEN			HEMOSIDEROSIS	+ + +	
			BONE MARROW		J	OSTEOGENESIS	+	
			NASAL CAVITY		- 1	INFILTRATION OF LEUCOCYTES	+	
			LARYNGOPHARYNX		J	CYSTIC DILATATION OF GLAND	+	
			TRACHEA		J	CYSTIC DILATATION OF GLAND	+	
			LUNG		5	CALCIFICATION OF VASCULAR WALL	+	
			SUBLINGUAL GLANDS		3	INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
			LIVER	YELLOWISH CHANGE	+	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + S	
			PANCREAS		П	INFILTRATION OF LEUCOCYTES	+	
			KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	
1) 4	1) FATE:	W KI AFTER	KILLED IN EXTREMIS TER START OF TREATMENT	2) GRADE	NEGA+++	PRESENTED 3) GRADE A C C C C C C C C C C C C C C C C C C	OF MASS: SMALL AND/OR MEDIAL AND/OR LARGE AND/OR	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

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INDIVIDUAL PATHOLOGICAL FINDINGS

MALE О РРМ LEVEL AND SEX :

1 1 1 1 1 1	! ! !	1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1			STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
2000	3	721	KIDNEYS				1 1 1 1 1 1 1 1	
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES	+ + + +	
						(BILATERAL) CALCIFICATION (BILATERAL)	+	
			TESTES	ATROPHY (BILATERAL) NODULE (UNILATERAL)	+ + + +	ATROPHY (UNILATERAL) HYPERPLASIA OF LEYDIG CELLS (UNILATERAL)	+ +	
			SEMINAL VESICLE	ATROPHY	+	АТКОРНУ	+	
			PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + + +	ADENOMA		
			MAMMARY GLAND			DILATATION OF GLAND	+ +	
			BRAIN	IMPRESSION	+	DILATATION OF CEREBRAL VENTRICLE	++	

1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

APPENDIX 11-M1-0008

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4.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

1 1 1 1 1 1 1	; ; ; ;			1		 	STUDY NO. 83004
ANIMAL 1) NUMBER FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE) HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJO THOLOGICAL FINDI
W 8000	289	MULTIPLE ORGANS THORACIC CAVITY	PLEURAL FLUID	+ + +	MONONUCLEAR CELL LEUKEMIA		LEYDIG CELL TUMOR: TESTES MONONUCLEAR CELL LEUKEMIA: MULTIPLE ORGANS
		HEART			FIBROSIS MIGRATION OF HEMOSIDERIN-LADEN CELLS	+ +	FIBROSARCOMA: SKIN (SUBCUTIS)
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
		LYMPH NODES			LYMPHADENITIS	+	
		SPLEEN	ENLARGEMENT	+ + +	АТRОРНҮ	++	
		BONE MARROW			ACTIVATION OF HEMATOPOIESIS OSTEOGENESIS	+ +	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LUNG	REDDISH CHANGE	+			
		LIVER	YELLOWISH CHANGE ROUGHNESS OF SURFACE	+ +	FATTY DEGENERATION OF HEPATIC CEL FIBROSIS HEMORRHAGE PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	CELLS + + + + + + + + + + + + + + + + + +	
		KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)		CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILAT	+	
1) FATE 4) DAYS		D IN EXTREM	2) GRADE	: NEGATIVE + , SLIGH ++ , MODER +++ , SEVER	NOT P		OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

CONTINUED
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APPENDIX

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CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE БРМ 0 LEVEL AND SEX :

1	1 1 1 1	1					! ! ! ! ! !	STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0008	3	687	KIDNEYS			PIGMENTATION (BILATERAL)	+	
			TESTES	ATROPHY (UNILATERAL)	+	LEYDIG CELL TUMOR (BILATERAL)		
				NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE	АТВОРНҮ	+	АТВОРНУ	+	
			SKIN (SUBCUTIS)	MASS	ِ ن	FIBROSARCOMA		
			BRAIN			HEMORRHAGE	+	

1) FATE : W , KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE РРМ 0 LEVEL AND SEX : STUDY NO. 83004

ANIMAL FA NUMBER	1) FATE DA	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
6000	۲ 73	733	HEART			FIBROSIS	 	LEYDIG CELL TUMOR: TESTES
			THYMUS		_	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
			SPLEEN		<u></u>	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
			BONE MARROW		C	OSTEOGENESIS	+	
		•	NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+ +	
			LARYNGOPHARYNX		Ü	CYSTIC DILATATION OF GLAND	+	
			TRACHEA		O	CYSTIC DILATATION OF GLAND	+	
			LIVER		ET M	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES ANGIECTASIA	+ + . + +	
		_	PANCREAS		4	ATROPHY OF PANCREATIC ACINUS	+	,
		_	KIDNEYS		0 1	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	
		•	TESTES	ATROPHY (UNILATERAL)	+	LEYDIG CELL TUMOR (BILATERAL)		
	1 1	1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

+ / SLIGHT ++ / MODERATE +++ / SEVERE

2) GRADE : NEGATIVE NOT PRESENTED

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1		1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUDY NO. 83004	! ! ! ! ! !	STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
			1					- 1
6000	>	۲ 733	TESTES					
				ENLARGEMENT	+			
				NODULE (BILATERAL)	++++			
			SEMINAL VESICLE	АТВОРНУ	+++	АТКОРНҮ	+	
			BULBOURETHRAL GLAND	ENLARGEMENT	+	CONGESTION	+	

1) FATE: Y / KILLED ON SCHEDULE 2) GRADE: NEGATIVE NOT PRES

2) GRADE : NEGATIVE NOT PRESENTED + / SLIGHT ++ / MODERATE +++ / SEVERE

4) DAYS : AFTER START OF TREATMENT

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1			STUDY NO. 83004
ANIMAL 1) NUMBER	1) 4) TE DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0010	W 608	HEART			FIBROSIS MIGRATION OF HEMOSIDERIN-LADEN CELLS		LEYDIG CELL TUMOR: TESTES MESENCHYMOMA: SKIN
		LYMPH NODES (SUBMAXI.) SPLEEN	ENLARGEMENT	+	C C C C C C C C C C C C C C C C C C C		PAPILLARY ADENOMA: LUNG
		BONE MARROW			OSTEOGENESIS	+ +	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES		
		LUNG	NODULE REDDISH CHANGE	+ +	PAPILLARY ADENOMA VASCULITIS	++	
		STOMACH			EROSION	+	
		SUBLINGUAL GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
		PAROTID GLANDS	ENLARGEMENT (UNILATERAL)	+			
		LIVER			FATTY DEGENERATION OF HEPA SMALL GRANULOMA CHOLANGIOFIBROSIS INFILTRATION OF LEUCOCYTES	HEPATIC CELLS +++ + YTES + +	
		PANCREAS			DILATATION OF DUCT	+	
! ! ! ! !	! ! ! ! !	KIDNEYS		J	HRONIC PROGRES	+	
1) FATE 4) DAYS			2) GRADE	NEGA + + + + + + + + + + + + + + + + + + +	TIVE NOT PRESENTED MODERATE SEVERE	3) GRADE OF MASS: A × SMALL AND/OR B × MEDIAL AND/OR C × LARGE AND/OR	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE
							f }

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APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : O PPM MALE

1 1 1 1 1 1 1 1	1	1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER	1) FATE	1	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0010	B		KIDNEYS		! ! ! ! ! ! !	GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) CALCIFICATION (UNILATERAL)	; ; ; ; ; ; ; ; ; ;	
			TESTES	ATROPHY (BILATERAL) NODULE (BILATERAL)	+ +	LEYDIG CELL TUMOR (BILATERAL)		
			SEMINAL VESICLE	АТВОРНУ	+	АТВОРНУ	+	
			SKIN (SUBCUTIS)	MASS	8	MESENCHYMOMA		
			HARDERIAN GLANDS REDDISH CHANGE (UNILATERAL)	REDDISH CHANGE CUNILATERAL)	+	INFLAMMATION (UNILATERAL)	+ +	
			BRAIN			HEMORRHAGE	+	

1) FATE: W . KILLED IN EXTREMIS 2) GRADE: NEGAT: + SI

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

3) GRADE OF:MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y . KILLED ON SCHEDULE

APPENDIX 11-M1-0011

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

1 1 1 1 1	1 1 1	!			1		1 1 1 1 1	STUDY NO. 83004
ANIMAL F, NUMBER.	1) FATE D	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0011	∠	733	HEART			FIBROSIS	! ! ! ! ! +	LEYDIG CELL TUMOR: TESTES
			THYMUS		<u>-</u>	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
			SPLEEN		<u>т</u> ш	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
			BONE MARROW		U	OSTEOGENESIS .	+	
			NASAL CAVITY		I B	INFILTRATION OF LEUCOCYTES GRANULATION	+ +	
			LUNG		S	CALCIFICATION OF VASCULAR WALL	+	
			LIVER		кткс н	FATTY DEGENERATION OF HEPATIC CELLS HYPERPLASTIC NODULE FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS	+ + + + +	
		_	PANCREAS		Ι .	ISLET-CELL ADENOMA		
		-	KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1		TESTES	ENLARGEMENT	+	LEYDIG CELL TUMOR (UNILATERAL)		

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

; ; ; ; ; ;	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	!					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUDY NO. 83004
ANIMAL 1) 4)	1)	(7	ORGAN	GROSS PATHOLOGICAL	2)3)	HISTOPATHOLOGICAL	(2	
NUMBER	- I	UA Y		FINDINGS	GRADE	FINDINGS	GRADE	OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
			· · · · · · · · · · · · · · · · · · ·		; ; ; ; ; ;			;
0011	>	Y 733	TESTES	(UNILATERAL)				
				ATROPHY	+	ATROPHY (UNILATERAL)	+	
				NODULE (UNILATERAL)	+ + +			
			PROSTATIC GLAND	АТВОРНУ	+ + +	INFLAMMATION	+	
			SEMINAL VESICLE	ATROPHY	+ + +	АТВОРНУ	+	
•			HARDERIAN GLANDS			INFILTRATION OF LEUCOCYTES	+	
						, U 1 E A I E A A E A		

1) FATE: Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ ' MODERATE +++ ' SEVERE

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11-M1-0012 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	; ; ; ;			! ! ! ! !			STUDY NO. 83004
ANIMAL 1) NUMBER FATE	4) DAYS	0 R G A N	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	OBABLE CEATH OR
0012 Y	733	HEART			HEMOSIDERIN-LADEN	+ +	LEYDIG CELL TUMOR: TESTES
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
		SPLEEN		•	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		TRACHEA			CYSTIC DILATATION OF GLAND	+	
		rung			CALCIFICATION OF VASCULAR WALL	+	
		LIVER	ENLARGEMENT	+	FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES SMALL GRANULOMA	+ + + + + + +	
		PANCREAS			ATROPHY OF PANCREATIC ACINUS	+	
		KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ + +	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

CONTINUED
11-M1-0012
APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

STUD.Y NO. 83004

ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOP	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0012	>	733	KIDNEYS				 	
						INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
			TESTES	NODULE (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
			PROSTATIC GLAND			INFLAMMATION	+	
			SEMINAL VESICLE	ATROPHY	+ + +	АТВОРНУ	+	
			BRAIN			PIGMENTATION	+	

3) GRADE OF MASS:

2) GRADE : NEGATIVE NOT PRESENTED

+ / SLIGHT ++ / MODERATE +++ / SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE: W , KILLED IN EXTREMIS

APPENDIX 11-M1-0013

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

	1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) NUMBER) 4) E DAYS	ORGAN	GROSS PÁTHOLOGICAL FINDINGS	2)3) GRADE	ICAL	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0013 W	714	MULTIPLE ORGANS			0] 	LEYDIG CELL TUMOR: TESTES
		SPLEEN	ENLARGEMENT	+ +	PROLIFERATION OF RETICULAR CELLS EXTRAMEDULLARY HEMATOPOIESIS	+ +	~
		BONE MARROW			ACTIVATION OF HEMATOPOIESIS	+	: MULTIPLE ORGANS
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LARYNGOPHARYNX			CYSTIC DILATATION OF GLAND	+	
		LUNG			HEMORRHAGE CALCIFICATION OF VASCULAR WALL ANEMIA	+ + +	
		LIVER	DISCOLORATION	+ + +	FOCAL ATROPHY OF HEPATIC CELLS INFILTRATION OF LEUCOCYTES PROLIFERATION OF BILE DUCT SMALL GRANULOMA	+ + + +	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
		TESTES	ATROPHY (INT. ATERAL)	++++	LEYDIG CELL TUMOR (BILATERAL)		
			ENLARGEMENT (UNILATERAL)	+ + +			

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

STUDY NO. 83004	2) PROBABLE CAUSE GRADE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS	1				
	2) GRADE	: : : : : : : : : : : : : : : : : : :		+	++	
	HISTOPATHOLOGICAL FINDINGS	1		INFLAMMATION	АТКОРНҮ	FIBROSARCOMA
 	2)3) GRADE		+ + +			_ ပ
	GROSS P		NODULE (BILATERAL)			MASS
				· PROSTATIC GLAND	SEMINAL VESICLE	SKIN (SUBCUTIS) MASS
1	1) 4) ATE DAYS	ı				
1	FATE		:			
† † † † †	ANIMAL 1) 4) FATE DAYS NUMBER	0013				

1) FATE : W , KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

STUDY NO. 83004

ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICA FINDI	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0014 Y	734	z			MONONUCLEAR CELL LEUKEMIA	 	LEYDIG CELL TUMOR: TESTES
		HEART			FIBROSIS	+	HEPATOCELLULAR ADENOMA : LIVER
		LYMPH NODES	ENLARGEMENT	+	BLOOD ABSORPTION	+	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS
		SPLEEN	ENLARGEMENT	+ +	CONGESTION HEMOSIDEROSIS	+ + + +	
		BONE MARROW			OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
	•	LARYNGOPHARYNX			CYSTIC DILATATION OF GLAND	+	
		LUNG			SWELLING OF ALVEOLAR EPITHELIUM	+	
		LIVER	ENLARGEMENT ROUGHNESS OF SURFACE	+ + + +	FATTY DEGENERATION OF HEPATIC CELLS HEPATOCELLULAR ADENOMA FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA ANGIECTASIA PROLIFERATION OF BILE DUCT	+ +++	
		PANCREAS			ATROPHY OF PANCREATIC ACINUS	. +	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

4) DAYS : AFTER START OF TREATMENT

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1						STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) ATE	4) DAYS	ORGAN	I N	.2)3) GRADE	HISTOPATHOLOGICAL	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0014	>-	734	KIDNEYS					
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ +	
			TESTES	ATROPHY (RILATERAL)	+	LEYDIG CELL TUMOR (BILATERAL)		
				NODULE (BILATERAL)	+++			
			PROSTATIC GLAND	ATROPHY	+ + +			
			SEMINAL VESICLE	ATROPHY	+ + +	АТВОРНУ	+	
			BRAIN			PIGMENTATION	+	

2) GRADE: NEGATIVE NOT PRESENTED
+ ' SLIGHT
++ ' MODERATE
+++ ' SEVERE 4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

· CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE M P P M LEVEL AND SEX :

	! ! !	! ! !			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		! ! ! ! !	STUDY NO. 83004
ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0015	> -	734	THYMUS			-	+	ADENOMA: PITUITARY GLAND C-CELL ADENOMA: THYROID
			LYMPH NODES		-	BLOOD ABSORPTION	+ +	GLANDS
			LYMPH NODES			CYST	+	
			SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
			LARYNGOPHARYNX		•	CYSTIC DILATATION OF GLAND	+	
			LUNG			CALCIFICATION OF VASCULAR WALL	+	
			LIVER	DISCOLORATION	+	FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+++++	
			PANCREAS		f	ATROPHY OF PANCREATIC ACINUS	+ +	
			KIDNEYS) H	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
			URINARY BLADDER		ш	EOSINOPHILIC COAGULATIVE SUBSTANCE	+	
1	1 1				1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE 4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

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CONTINUED 11-M1-0015 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

	! ! !	; ; ; ; ;						STUDY NO. 83004
ANIMAL 1) 4) NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0015	>-	734	TESTES	ATROPHY	+ + +	PERIVASCULITIS (BILATERAL)	+ + +	
				NODULE (BILATERAL)	+ +	CALCIFICATION (BILATERAL)	÷ +	
			SEMINAL VESICLE	ENLARGEMENT	+ + +			
			PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + + +	ADENOMA		
			THYROID GLANDS	ENLARGEMENT (UNILATERAL)	+ +	C-CELL ADENOMA (UNILATERAL)		
			MAMMARY GLAND			DILATATION OF GLAND	+	
			HARDERIAN GLANDS	ω		INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
			BRAIN	IMPRESSION	+	DILATATION OF CEREBRAL VENTRICLE PIGMENTATION	+ + +	

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

1) FATE : Y , KILLED ON SCHEDULE

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11-M1-0016 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 0 PPM LEVEL AND SEX :

	1			! ! ! !			STUDY NO. 83004
ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0016 W	435	MULTIPLE ORGANS			MONONUCLEAR CELL LEUKEMIA		MONONUCLEAR CELL I FILKEMIA
		ABDOMINAL CAVITY HEMORRHAGE	Y HEMORRHAGE	++			: MULTIPLE ORGANS
•		HEART			FIBROSIS	+ +	
		THYMUS	ENLARGEMENT	+			
		LYMPH NODES	ENLARGEMENT	+ +			
		SPLEEN	ENLARGEMENT	+ + +			
		BONE MARROW			ACTIVATION OF HEMATOPOIESIS	+ +	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LUNG	HEMORRHAGE	+			
		STOMACH		,	ULCER	+	
		LIVER	ENLARGEMENT ROUGHNESS OF SURFACE	+ + + +	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT	÷ + +	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	
		TESTES			HYPERPLASIA OF LEYDIG CELLS (UNILATERAL)	+	

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : W , KILLED IN EXTREMIS

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17

3) GRADE OF MASS:

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CONTINUED	
11-M1-0016	
APPENDIX	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

1 1 1	1	1 1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	AT		PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0016	3	35	TESTES				! ! ! ! !	
					A	ATROPHY (BILATERAL)	+	
			PITUITARY GLAND		S	SWELLING OF BASOPHILIC CELLS	+	
			THYROID GLANDS		ш	ENLARGEMENT OF FOLLICLE (BILATERAL) +	+	
			ADRENAL GLANDS		>	VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	‡	
•			BRAIN	HEMORRHAGE	+++	LEUKEMIC EMBOLISM	+ + +	
			SPINAL CORD		ij	LEUKEMIC EMBOLISM	+	

2) GRADE : NEGALIVE NOI PRESENTED	+ \ SLIGHT	++ \ MODERATE	+++ SEVERE
יי ייר י אי יירררט דוא באורנט			4) DAYS : AFTER START OF TREATMENT

1) FATE : W , KILLED IN EXTREMIS

11-M1-0017 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

STUDY NO. 83004

ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0017	>-	734	неакт			FIBROSIS	! ! ! ! ! ! !	JMOR: TES
			THYMUS		-	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
			SPLEEN		<u> </u>	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
			BONE MARROW			ACTIVATION OF HEMATOPOIESIS OSTEOGENESIS	+ +	
			NASAL CAVITY		н	INFILTRATION OF LEUCOCYTES	+	
			LARYNGOPHARYNX		S	CYSTIC DILATATION OF GLAND	+	
			rung		ວ	CALCIFICATION OF VASCULAR WALL	+	
			LIVER		к е. н	FATTY DEGENERATION OF HEPATIC PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	CELLS + + +	
			KIDNEYS) L H	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
			TESTES	ATROPHY (UNILATERAL)	++++	LEYDIG CELL TUMOR (BILATERAL)		
1)	FATE	>	KILLED ON SCHEDULE	E 2) GRADE :	NEG/	PRESENTED 3)	ADE	
(7	DAYS	: AFTE	AFTER START OF TREATMENT			AATE B		SHALL AND/OK SINGULAK MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

2

CONTINUED 11-M1-0017 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE О РРМ LEVEL AND SEX :

1 1 1 1 1 1 1 1	1 1 1 1 1	!!!!!!!!	1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER	1) FATE	4) DAYS		GROSS PA	2)3) GRADE		2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL EINDINGS
0017	>-	734	S	1	 			
				NODULE (BILATERAL)	+ + +			
			PROSTATIC GLAND		Ħ	INFLAMMATION	+	
			SEMINAL VESICLE		A	АТКОРНУ	+	7
			ADRENAL GLANDS		x	HYPERPLASTIC NODULE (UNILATERAL)	+	
			SKIN (SUBCUTIS)	MASS	O.	FIBROSARCOMA		
			BRAIN		Δ.	PIGMENTATION	+	

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE 1) fATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

11-M1-0018 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	1					; ; ; ; ;	STUDY NO. 83004
ANIMAL 1) FATE NUMBER	E DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0018 Y	734	HEART			FIBROSIS	 	LEYDIG CELL TUMOR: TESTES
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	SCUTIS
		LYMPH NODES (PULM.HILUS)		ш	BLOOD ABSORPTION	+	
		SPLEEN		Ι Ш	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
		NASAL CAVITY		I	INFILTRATION OF LEUCOCYTES	+	
		LUNG		0	CALCIFICATION OF VASCULAR WALL	+	
		SUBLINGUAL GLANDS		I	INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
		PAROTID GLANDS		Η ,	INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
		LIVER		, .	FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS WITH FERATION OF BILE DUCT WITH FIBROSIS	+ + + +	
		PANCREAS		H	INFILTRATION OF LEUCOCYTES	+	
		KIDNEYS		5	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	
1) FATE		KILLED ON SCHEDULE	2) GRADE :	EGATIVE SLIG MODE	NOT PRESENTED 3) GRADE T ATE	OF MASS: SMALL AND/OR	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC
	•	SIARI OF		+++ SEVE	· · ·	LARGE AND	/OR MULTIPLE

CONTINUED	OLOGICAL STUDY
11-M1-0018	ARCINOGENIC INHALATION TOXICOLOGICAL OF METHANOL IN FISCHER RAT
APPENDIX	CARCINOGENIC OF METHANOE
	AND
	CHRONIC AND

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INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!						STUDY NO. 83004
ANIMAL 1) 4)	1)	(7)	ORGAN	GROSS PATHOLOGICAL	2)3)	HISTOPATHOLOGICAL	(6	
NUMBER	7 A - E	DAYS	1	FINDINGS	GRADE	FINDINGS	GRADE	FRUBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0018	>-	734	734 KIDNEYS		! ! ! ! !	1		
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ +	
			TESTES	NODULE (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
			PROSTATIC GLAND	ATROPHY	+			
			SEMINAL VESICLE	ATROPHY	+	АТКОРНУ	+.	
			ADRENAL GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
			SKIN (SUBCUTIS)	MASS	ပ	FIBROSARCOMA		
			BRAIN		_	PIGMENTATION	+	

11-M1-0019 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE О РРМ LEVEL AND SEX :

1	!	1			1			STUDY NO. 83004
ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	CAUSE R MAJOR
0019	>-	734				FIBROSIS	+	
			THYMUS		<u></u>	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	- +	reconnomical Abrenal GLANDS LEYDIG CELL TUMOR: TESTES
			LYMPH NODES (SUBMAXI.)		Ü	CYST	+	
			SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
			BONE MARROW	•	0	OSTEOGENESIS	+	1.
			rung		S	CALCIFICATION OF VASCULAR WALL	+	
			LIVER		ппо но	FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES SMALL GRANULOMA	+ + + + + +	
			KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+ -	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
			TESTES	ATROPHY (UNILATERAL)	+	LEYDIG CELL TUMOR (BILATERAL)		

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE 4) DAYS : AFTER START OF TREATMENT 1) FATE: Y XILLED ON SCHEDULE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

1 1 1 1 1 1 1		1			1			STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS	1) ATE	4) DAYS	ORGAN	SS PATH	2)3) ADE	HISTOPATHOLOGICAL FINDINGS		PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0019	>-	734			1 ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !			1
				NODULE (BILATERAL)	+++			
			PROSTATIC GLAND	ATROPHY	+ + +			
			SEMINAL VESICLE	ATROPHY	++++	АТКОРНҮ	+	
			ADRENAL GLANDS		_	PHEOCHROMOCYTOMA (UNILATERAL) HYPERPLASTIC NODULE (UNILATERAL)	+	
			SKIN		_	FOLLICULITIS	++	
			BRAIN			PIGMENTATION	+	

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

	1 1 1			! ! ! !		1	STUDY NO. 83004
ANIMAL 1) NUMBER FATE	1) 4) TE DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	ı o⊢
۷ 0 2 0 0	γ 734	HEART			FIBROSIS MIGRATION OF HEMOSIDERIN-LADEN CELLS	 + + +	C-CELL ADENOMA: THYROID GLANDS PHEOCHROMOCYTOMA: ADRENAL
		THYMUS	• •	•	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	GLANDS LEYDIG CELL TUMOR: TESTES FIBROSARCOMA: SKIN
		SPLEEN		- J -	EXTRAMEDULLARY HEMATOPOIESIS CONGESTION HEMOSIDEROSIS	+ + +	(SUBCUTIS) PAPILLOMA: SKIN
		BONE MARROW			OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LARYNGOPHARYNX		Ü	CYSTIC DILATATION OF GLAND	+	
		LUNG		C	CALCIFICATION OF VASCULAR WALL	+	
		LIVER		H.O.	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES SMALL GRANULOMA	+ + + + + 0	
		KIDNEYS		;	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	

3) GRADE OF MASS:	A / SMALL AND/OR SINGULAR	B . MEDIAL AND/OR SPORADIC	C . LARGE AND/OR MULTIPLE
2) GRADE : NEGATIVE NOT PRESENTED	+ > SLIGHT	++ MODERATE	+++ SEVERE
FATE : Y , KILLED ON SCHEDULE			DAYS : AFTER START OF TREATMENT

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CONTINUED 11-M1-0020 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE О РРМ LEVEL AND SEX :

	1				: : : :		! ! ! ! ! !	STUDY NO. 83004
ANIMAL FA NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0020	≻	734	KIDNEYS			INFILTRATION OF LEUCOCYTES	! ! ! ! ! ! ! !	
			TESTES	ENLARGEMENT (UNILATERAL) NOBILI F (RITIATERAL)	+ + + + + +	LEYDIG CELL TUMOR (BILATERAL)		
			PROSTATIC GLAND			HYPERPLASIA OF MUCOSAL EPITHELIUM	+	
			SEMINAL VESICLE	ATROPHY	+ + +	АТВОРНУ	++	
			THYROID GLANDS	ENLARGEMENT (BILATERAL)	f +	C-CELL ADENOMA (BILATERAL)		
			ADRENAL GLANDS			PHEOCHROMOCYTOMA (UNILATERAL)		
			SKIN	NODULE	+	PAPILLOMA		
			SKIN (SUBCUTIS)	MASS	υ	:FIBROSARCOMA		
			HARDERIAN GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
			BRAIN		į	PIGMENTATION	+	

3) GRADE OF MASS:	A / SMALL AND/OR SINGULAR	B / MEDIAL AND/OR SPORADIC	C . LARGE AND/OR MULTIPLE
2) GRADE : NEGATIVE NOT PRESENTED	+ SLIGHT	++ \ MODERATE	+++ SEVERE
1) FATE : Y , KILLED ON SCHEDULE			4) DAYS : AFTER START OF TREATMENT

1) FATE : Y

3) GRADE OF MASS:

APPENDIX 11-M1-0021

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOE IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : O PPM MALE

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ANIMAL

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1						VOCES ON VOILS
1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS		PROBABLE CAUSE OF DEATH OR MAJOR
1	1 1 1 1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			PATHOLOGICAL FINDINGS
3	726	MULTIPLE ORGANS			LL LEUK		
		HEART				+	ADENUMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES
		SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+	MUNDONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS
		BONE MARROW			OSTEOGENESIS	. +	
		LIVER	MASS YELLOWISH CHANGE	∢ +	FATTY DEGENERATION OF HEPATIC CELLS HYPERPLASTIC NODULE PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + + + +	
		KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	· + +	
		TESTES	NODULE (BILATERAL) ATROPHY (UNILATERAL)	+ + +	LEYDIG CELL TUMOR (UNILATERAL)		
		PITUITARY GLAND	HEMORRHAGE ENLARGEMENT	• + + + + + +	ADENOMA		
	-	MAMMARY GLAND			DILATATION OF GLAND	+	
		BRAIN	IMPRESSION	+	PIGMENTATION	+	

1) FATE: W KILLED IN EXTREMIS
2) GRADE: NEGATIVE NOT PRESENTED
4 SLIGHT
4 MODERATE
4) DAYS: AFTER START OF TREATMENT
4 SEVERE

			STUDY NO. 83004	ROBABLE CA DEATH OR M. LOGICAL FI								
			! ! ! ! ! ! ! !	. 2) GRADE	+							
CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	INDIVIDUAL PATHOLOGICAL FINDINGS	LEVEL AND SEX : 0 PPM MALE		GROSS PATHOLOGICAL 2)3) HISTOPATHOLOGICAL FINDINGS GRADE FINDINGS	HEMORRHAGE							
				ANIMAL 1) 4) ORGAN G RATE DAYS NUMBER	0021 W 726 BRAIN							

CONTINUED

11-M1-0021

APPENDIX

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4) DAYS : AFTER START OF TREATMENT

1) FATE : W , KILLED IN EXTREMIS

., 2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

11-M1-0022 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

	! ! !					; ; ; ;	STUDY NO. 83004	
1) FATE DA	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	OBABLE CAUSE EATH OR MAJOR OGICAL FINDINGS	
79 A	670	HEART			N 0	! ! ! ! ! ! + +	ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES	
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+		-
		LYMPH NODES			BLOOD ABSORPTION	+		
		SPLEEN	ENLARGEMENT	+	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +		
	-	NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+		
	-	LUNG			CALCIFICATION OF VASCULAR WALL	+		
		STOMACH			HYPERPLASIA OF FORESTOMACH MUCOSAL EPITHELIUM	+		
	-	LIVER	YELLOWISH CHANGE	+	FATTY DEGENERATION OF HEPATIC CELLS ++ FOCAL ATROPHY OF HEPATIC CELLS ++ PROLIFERATION OF BILE DUCT + WITH FIBROSIS INFILTRATION OF LEUCOCYTES +	+ + + + + + +		
	.¥.	KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	*+ +	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ + +		

3) GRADE OF MASS:	A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC	מייייייייייייייייייייייייייייייייייייי
2) GRADE : NEGATIVE NOT PRESENTED	+	
1) FATE : W / KILLED IN EXTREMIS	4) DAYS : AFTER START OF TREATMENT	

1)

CONTINUED 11-M1-0022 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

	1	!			1			STUDY NO. 83004
ANIMAL	1) 4) FATE DAYS	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0022	3	670	KIDNEYS					PATHOLOGICAL FINDINGS
						INFILTRATION OF LEUCOCYTES (BILATERAL)	+	
			TESTES	ATROPHY (BILATERAL)	+	LEYDIG CELL TUMOR (UNILATERAL)		:
				NODULE (BILATERAL)	++			
			PITUITARY GLAND	ENLARGEMENT	+ + +	ADENOMA		
			ADRENAL GLANDS	ENLARGEMENT (UNILATERAL)	+			
			SKIN	MASS	¥	KERATOSIS	+	
			MAMMARY GLAND			DILATATION OF GLAND	+	
			HARDERIAN GLANDS		•	INFILTRATION OF LEUCOCYTES CUNILATERAL)	+	
			BRAIN	IMPRESSION	++	DILATATION OF CEREBRAL VENTRICLE	+	

1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , NODERATE +++ , SEVERE

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

11-M1-0023 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

					; ; ; ; ;	STUDY NO. 83004
ANIMAL 1) 4) NUMBER	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	L 0 2
0023 Y 734	HEART			FIBROSIS	++	
	THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	LEYDIG CELL TUMOR: TESTES
	SPLEEN			CONGESTION HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
	LARYNGOPHARYNX			CYSTIC DILATATION OF GLAND	+	
	LUNG			CALCIFICATION OF VASCULAR WALL	+	
	LIVER			INFILTRATION OF LEUCOCYTES PROLIFERATION OF BILE DUCT WITH FIBROSIS SMALL GRANULOMA	+++	
	PANCREAS			ATROPHY OF PANCREATIC ACINUS INFILTRATION OF LEUCOCYTES	+ +	
-	KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + ++	
L	TESTES	NODULE (BILATERAL)	++	.EYDIG CELL TUMOR (BILATERAL)		
u.	PITUITARY GLAND	ENLARGEMENT	+++	ADENOMA		
1) FATE: Y K	: Y / KILLED ON SCHEDULE : AFTER START OF TREATMENT	2) GRADE :	N N H H H H H H H H	PRESENTED 3) GRADE A	OF MASS: SMALL AND/ORS MEDIAL AND/OR	ISS: AND/OR SINGULAR AND/OR SPORADIC AND/OR MULTIPLE

CONTINUED	
11-M1-0023	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

STUDY NO. 83004

! ! !		S	1		
	OF DEATH OR MAJOR	PATHOLOGICAL FINDINGS			
	GRADE				
061CA) 2)33) HISTOBATHOLOGICAL	FINDINGS				
() ()	GRADE				+
GROSS PATHOLOGICAL	FINDINGS				HEMORRHAGE
ANTES 10 C C C C C C C C C C C C C C C C C C				734 PITUITARY GLAND	
(7	DAYS		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	734	
	FATE DAYS		! ! !	>-	
ANTWA!	1	NUMBER	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0023	

DILATATION OF GLAND

MAMMARY GLAND

2) GRADE: NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
++ / SEVERE

1) FATE: Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

11-M1-0024 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE О РРМ LEVEL AND SEX :

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	< .	DAT
0024 W	673	HEART	GRAYISH CHANGE	+	FIBROSIS	; ; ; ; + ; +	ADENOMA: PITUITARY GLAND
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	LEYDIG CELL TUMOR: TESTES PHEOCHROMOCYTOMA: ADRENAL GLANDS
	·	SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	FIBROSIS: HEART
		BONE MARROW			OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+ +	
		LARYNGOPHARYNX			CYSTIC DILATATION OF GLAND	+	
		LUNG			CALCIFICATION OF VASCULAR WALL	+	
		LIVER		•	FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT INFILTRATION OF LEUCOCYTES	+ + + + +	
		PANCREAS			ATROPHY OF PANCREATIC ACINUS FIBROSIS	+ +	
		KIDNEYS		÷	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	

4) DAYS : AFTER START OF TREATMENT 1) FATE: W , KILLED IN EXTREMIS

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

CONTINUED 11-M1-0024 APPENDIX CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

	1 1 1			! ! ! !			STUDY NO. 83004
ANIMAL 1) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0024 W	673	KIDNEYS			INFILTRATION OF LEUCOCYTES (BILATERAL)	+	
		TESTES	ENLARGEMENT	++++	LEYDIG CELL TUMOR (BILATERAL)	• •	
			ATROPHY	+ + +			
			NODULE CUNILATERAL)	+			
		SEMINAL VESICLE		,	ATROPHY	+	
		PITUITARY GLAND	ENLARGEMENT Hemorrhage	+ + + + + + +	ADENOMA		
		. ADRENAL GLANDS	ENLARGEMENT (UNILATERAL)	+ +	PHEOCHROMOCYTOMA (UNILATERAL)		
		MAMMARY GLAND		- 7,	DILATATION OF GLAND	+	
		BRAIN	IMPRESSION	++	DILATATION OF CEREBRAL VENTRICLE HEMORRHAGE	+ +	

1) FATE : W . KILLED IN EXTREMIS

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

4) DAYS : AFTER START OF TREATMENT

11-M1-0025 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

	1	! ! ! !	! ! ! ! ! !		1			STUDY NO. 83004
ANIMAL NUMBER	FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0025	>-	734	HEART		2	CARDITIS	 	
			THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+ +	LETUIG CELL IUMUK: IESTES
			SPLEEN		Ι.Μ.	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
			BONE MARROW		0	OSTEOGENESIS	+	
			NASAL CAVITY		Н	INFILTRATION OF LEUCOCYTES	+	
			LUNG		ပ	CALCIFICATION OF VASCULAR WALL	+	
			LIVER		<u>н</u> н	FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + +	
			PANCREAS		Υ.	ATROPHY OF PANCREATIC ACINUS	+	
		•	KIDNEYS	•	O & H	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
			TESTES	ENLARGEMENT (UNILATERAL)	+	LEYDIG CELL TUMOR (BILATERAL)		

2) GRADE : NEGATIVE NOT PRESENTED	+ SLIGHT	++ \ MODERATE	+++ SEVERE
1) FATE : Y / KILLED ON SCHEDULE			4) DAYS : AFTER START OF TREATMENT

.

CONTINUED 11-M1-0025 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE О РРМ LEVEL AND SEX :

SIUDY NO. 83004	PROBABLE CAUSE OF DEATH OR MAJOR					·	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2) GRADE					+	3AL> +
\nn s	HISTOPATHOLOGICAL FINDINGS					АТКОРНУ	HYPERPLASIA OF C-CELLS (UNILATERAL) +
1	2)3) GRADE			+ + +	+ + +	+ + +	
1	GROSS PATHOLOGICAL FINDINGS			NODULE (BILATERAL)	ATROPHY	АТВОРНУ	• •
	ORGAN		TESTES		PROSTATIC GLAND ATROPHY	SEMINAL VESICLE	THYROID GLANDS
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	ANIMAL 1) 4) NUMBER	1 1 1 1 1 1 1 1	Y 734				
1 1 1 1 1 1	FATE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	>				
1 1 1 1 1 1	ANIMAL	1 1 1 1 1	0025				

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : O PRM MALE

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ANIMAL F.

STUDY NO. 83004

- 1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
>	734	HEART			FIBROSIS	+	ADENOMA: PITUITARY GLAND
		THYMUS		•	HYPERPLASIA OF EPITHELIAL RETICULUM ÇELLS	÷	FIBRUSARCUMA: SKIN (SUBCUTIS) LIPOMA: SKIN (SUBCUTIS)
		LYMPH NODES			BLOOD ABSORPTION	+	
		(PULM.HILUS) SPLEEN		,	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
		BONE MARROW			OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	-
		LUNG		_	CALCIFICATION OF VASCULAR WALL	4	
		LIVER		•	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + + S 	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	

TREATMENT	
u C	
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1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

ATROPHY (BILATERAL)

ATROPHY (BILATERAL)

TESTES

A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

3) GRADE OF MASS:

TER START OF TREATM

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CONTINUE
11-M1-0026
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

1 1 1	1 1 1 1	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1			STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	FATE	4) DAYS	0 R G A N	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0026	>-	Y 734	PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + + + +	+++ ADENOMA	1 1 1 1 1 1 1	
			SKIN (SUBCUTIS) MASS	MASS	U	FIBROSARCOMA LIPOMA		i
			MAMMARY GLAND			DILATATION OF GLAND	+	
			EYE BALLS	ENLARGEMENT (UNILATERAL)	+	CATARACT (UNILATERAL)	+	
			BRAIN			DILATATION OF CEREBRAL VENTRICLE	+	

¹⁾ FATE : Y , KILLED ON SCHEDULE

²⁾ GRADE : NEGATIVE NOT PRESENTED
+ ' SLIGHT
++ ' MODERATE
+++ ' SEVERE

3) GRADE OF MASS:

11-M1-0027 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 0 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUDY NO. 83004
ANIMAL F NUMBER	1) FATE D/	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0027	W 62	623	ABDOMINAL CAVITY ASCITES	Y ASCITES	+++			TOTAL TINDINGS
			PERITONEUM	NODULE	+ + +	MESOTHELIOMA		LEYDIG CELL TUMOR: TESTES MESOTHELIOMA: PERITONEUM
			HEART			FIBROSIS	+	
		•	THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	· +	
		··	SPLEEN			CONGESTION EXTRAMEDULLARY HEMATOPOIESIS	+ +	
•		ш	BONE MARROW			ACTIVATION OF HEMATOPOIESIS	· +	
		~	NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
			LIVER	YELLOWISH CHANGE	+	FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS	+ + +	
		×	KIDNEYS	BLACKISH CHANGE (BILATERAL)	+ + +	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	
		-	TESTES	ENLARGEMENT (UNILATERAL) ATROPHY (UNILATERAL)	- + + + + + +	LEYDIG CELL TUMOR (BILATERAL)		

1) FATE : W / KILLED IN EXTREMIS

2) GRADE: NEGATIVE NOT PRESENTED + / SLIGHT ++ / MODERATE +++ / SEVERE

4) DAYS : AFTER START OF TREATMENT

3) GRADE OF MASS:

CONTINUED
11-M1-0027
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE PPM 0 LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1	!!!!!!!				! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !			STUDY NO. 83004
ANIMAL 12 45	11	(7)	ORGAN	GROSS PATHOLOGICAL	2)3)	HISTOPATHOLOGICAL	· · · · · · · · · · · · · · · · · · ·	
NUMBER	A - F	DAYS		FINDINGS	GRADE	FINDINGS	GRADE	PRUBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0027	3	623	TESTES	i i i i i i i i i i i i i i i i i i i	 			
				NODULE (BILATERAL)	+ + +			
			EPIDIDYMIS			ATROPHY (BILATERAL)	+	
			SEMINAL VESICLE			ATROPHY	. +	•
			THYROID GLANDS	CYST (UNILATERAL)	+	CYST (UNILATERAL)	+	
			EYE BALLS	HEMORRHAGE (UNILATERAL)	+	CATARACT (UNILATERAL) HEMORRHAGE (UNILATERAL)	+ +	
			BRAIN			PIGMENTATION	+	

1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE

3) GRADE OF MASS:

APPENDIX 11-M1-0028

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

						. !	STUDY NO. 83004
ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	S	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0028 Y	735	НЕДВТ					
	.			i.	FIBROSIS	+	PHEOCHROMOCYTOMA: ADRENA!
		THYMUS		£	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	LEYDIG CELL TUMOR: TESTES
		SPLEEN		00 #	CONGESTION	+	
				Ш	EXTRAMEDULLARY HEMATOPOIESIS	+ +	
		BONE MARROW		SO	OSTEOGENESIS	+	
		NASAL CAVITY		NI	INFILTRATION OF LEUCOCYTES	- 4	
		LARYNGOPHARYNX		NI	INFILTRATION OF LEUCOGYTES	٠ .	
		TRACHEA		NI	0 F	· 4	
		רחאפ		IN		- + +	·
		LIVER		FO PR	FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIRROSIS	- + +	
				NI	INFILTRATION OF LEUCOCYTES	+	
		PANCREAS		ATF	ATROPHY OF PANCREATIC ACINUS	+	
	-	KIDNEYS		CH5 GL	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	

1) FATE : Y . KILLED ON SCHEDULE

2) GRADE : WEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE О РРМ LEVEL AND SEX :

	.!		1 1 1			:		STUDY NO, 83004
ANIMAL 1) 4) FATE DAYS NUMBER	4) DAYS	ORGAN		GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0028 Y	735	KIDNEYS			[PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	,+ +	
		TESTES		ENLARGEMENT (UNILATERAL) ATROPHY	+ + + +	LEYDIG CELL TUMOR (BILATERAL)		
				NODULE (BILATERAL)	++++			
		SEMINAL VESICLE	ESICLE	ATROPHY	+ + +	АТКОРНУ	+	••
		THYROID GLANDS	LANDS			HYPERPLASIA OF C-CELLS (UNILATERAL) ++ CYST (UNILATERAL) +	+ +	
		ADRENAL GLANDS	LANDS		-	PHEOCHROMOCYTOMA (UNILATERAL)		
		BRAIN				PIGMENTATION	+	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL'IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

					1			STUDY NO. 83004
ANIMAL	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
	=	, L			! ! ! !		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
6 2000	⋧	929	SSO SPLEEN			HEMOSIDEROSIS CONGESTION	+ + + + +	ENCEPHALOMYELITIS: BRAIN
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	CORD
			LIVER	DISCOLORATION	+	PROLIFERATION OF BILE DUCT INFILTRATION OF LEUCOCYTES	+ +	
			URETER	NODULE (UNILATERAL)	+			
			TESTES		_	HYPERPLASIA OF LEYDIG CELLS (UNILATERAL)	. +	
			PITUITARY GLAND		_	HYPERPLASIA OF CHROMOPHOBE CELLS	+	
			HARDERIAN GLANDS		r	INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
			BRAIN		m`œ r	ENCEPHALOMYELITIS PROLIFERATION OF GLIA CELLS PERIVASCULITIS	+ + +	
			SPINAL CORD		ш	ENCEPHALOMYELITIS	+	

4) DAYS : AFTED STADT OF THEATHER	
	1, rate : w / KILLED IN <u>EXTREMIS</u> 2) GRADE : NEGATIVE NOT PRESE
+ SLIGHT	

SENTED ++ / MODERATE +++ / SEVERE

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

APPENDIX 11-M1-0030

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 P.PM MALE

STUDY NO. 83004	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS	LEYDIG CELL TUMOR: TESTES HEPATOCELLULAR CARCINOMA	PHEOCHROMOCYTOMA: ADRENAL GLANDS								
	2) GRADE	++	-4-	+	+	+	*	+ + + +	.+ ++		+
	HISTOPATHOLOGICAL FINDINGS	FIBROSIS MIGRATION OF HEMOSIDERIN-LADEN CELLS	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	HEMOSIDEROSIS	OSTEOGENESIS	INFILTRATION OF LEUCOCYTES	CALCIFICATION OF VASCULAR WALL	HEPATOCELLULAR CARCINOMA FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	LEYDIG CELL TUMOR (BILATERAL)	АТВОРНҮ
1	2)3) GRADE			<u> </u>	U	H	8	A HTTT H	O	++÷	++
	GROSS PATHOLOGICAL FINDINGS				-			MASS		NODULE (BILATERAL)	АТВОРНҮ
	ORGAN	HEART	THYMUS	SPLEEN	BONE MARROW	NASAL CAVITY	LUNG	LIVER	KIDNEYS	TESTES	SEMINAL VESICLE
1	4) DAYS	735				•					,
!	1) FATE	>-									i ! !
1	ANIMAL NUMBER	0030									! ! ! ! !

CONTINUED	1 TOXICOLOGICAL STUDY R RAT
11-M1-0030	INHALATION IN FISCHE
APPENDIX	CARCINOGENIC OF METHANOL
	AND
	CHRONIC AND

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE M P P M LEVEL AND SEX :

STUDY NO. 83004	PROBABLE CAUSE OF DEATH OR MAJOR		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2) GRADE	+ + +	
	HISTOPATHOLOGICAL FINDINGS	PHEOCHROMOCYTOMA (UNILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL) HYPERSECRETION (UNILATERAL) PIGMENTATION	
	GROSS PATHOLOGICAL FINDINGS		
	ORGAN	ADRENAL GLANDS HARDERIAN GLANDS BRAIN	
!	4) DAYS	7 735	
 	1) FATE	>-	
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	ANIMAL 1) 4) NUMBER	0030	

1) FATE: Y KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL, IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1			1		1	STUDY NO. 83004
ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBAB OF DEATH ATHOLOGIC
0031	>-	735	HEART			FIBROSIS	+ +	LEYDIG CELL TUMOR: TESTES
			THYMUS		-	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	ISLET-CELL ADENOMA : PANCREAS SQUAMOUS CELL CARCINOMA
			SPLEEN	-		CONGESTION EXTRAMEDULLARY HEMATOPOIESIS	+ +	: SKIN
			BONE MARROW		7	ACTIVATION OF HEMATOPOIESIS OSTEOGENESIS	+ +	
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+ +	
			רחאפ		6,0	SWELLING OF ALVEOLAR EPITHELIUM CALCIFICATION OF VASCULAR WALL	+ +	
			LIVER		SEE HE	SMALL GRANULOMA FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES FATTY DEGENERATION OF HEPATIC CELLS	+ + + + + + •	
			PANCREAS		H 4	ISLET-CELL ADENOMA ATROPHY OF PANCREATIC ACINUS	+	
			KIDNEYS		U	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

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CONTINUED
11-M1-0031
APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

. ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	1		!			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1)	1) 4)	4) ORGAN		GROSS	GROSS PATHOLOGICAL	2)3)	HISTOPATHOLOGICAL	(2	DROBABIE
NUMBER	- I) 			NIO	GRADE	FINDINGS	GRADE	OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0031 Y	Y 735	S KIDNEYS				 			
							PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ +	
		TESTES		NODULE	NODULE (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)	î	
		SEMINAL VESICLE	ESICLE	ATROPHY		+ + +	АТВОРНУ	+	
		SKIN		ABSCESS		++++	SQUAMOUS CELL CARCINOMA		
		HARDERIAN GLANDS	GLANDS				INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
		BRAIN					PIGMENTATION	+	
					•				

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

					1	STUDY NO. 83004
ANIMAL 1) 4) NUMBER	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL ETWALACE
0032 Y 735	HEART		L E 	FIBROSIS MIGRATION OF HEMOSIDERIN-LADEN CELLS	++	LEYDIG CELL TUMOR: TESTES PHEOCHROMOCYTOMA: ADRENAL
	THYMUS		π	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	GLANDS FIBROMA: SKIN (SUBCUTIS)
	SPLEEN		Ŧ	SI	+	
	BONE MARROW		30	OSTEOGENESIS	- +	
	NASAL CAVITY		I	INFILTRATION OF LEUCOCYTES	. 4	
	Lung		C	CALCIFICATION OF VASCULAR WALL	- 4	
	LIVER		FA HY GR GR '	TTY DEGENER. PERPLASTIC I ANULATION OLIFERATION ITH FIBROSIS		
_	PANCREAS		AT	ATROPHY OF PANCREATIC ACINUS	- 4	
_	KIDNEYS	<u>.</u>	HO CH	er ()	+ ++	
	TESTES	ENLARGEMENT		LEYDIG CELL TUMOR (BILATERAL)		
1) FATE: Y , KJ	ILLED ON S	2) GRADE	NEGATIVE NOT SLIGHT THE MODERATE	PRESENTED 3) GRADE A	OF MASS SMALL AND,	OR SINGULAR
•	SIAKI OF	I REATMENT	+++ SEVERE		LARGE AND	MEDIAL AND/OK SPORADIC LARGE AND/OR MULTIPLE

CONTINUED 11-M1-0032 APPENDIX CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 0 PPM LEVEL AND SEX :

								STUDY NO. 83004
ANIMAL NUMBER	1:) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0032	> -	735	TESTES	(UNILATERAL) NODULE (BILATERAL)	+ + +			
			PROSTATIC GLAND			HYPERPLASIA OF MUCOSAL EPITHELIUM	+	
			SEMINAL VESICLE	ATROPHY	+ + +	АТВОРНУ	+	
			THYROID GLANDS			HYPERPLASIA OF C-CELLS (BILATERAL)	+ +	
			ADRENAL GLANDS	ENLARGEMENT (UNILATERAL)	+ + +	PHEOCHROMOCYTOMA (UNILATERAL)		
			SKIN (SUBCUTIS)	MASS	Ą	FIBROMA		
			HARDERIAN GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
			BRAIN			PIGMENTATION	+	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED

+ SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

11-M1-0033 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX :

MALE Mdd 0

			1		1	STUDY NO. 83004
ANIMAL 1) FATE DA	4) ORGAN DAYS	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	
0033 Y 735	5 HEART			FIBROSIS	 	LEYDIG CELL TUMOR: TESTES
	THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	- 1-	
	SPLEEN			HEMOSIDEROSIS	+	·
	NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	٠
	LUNG		0	SWELLING OF ALVEOLAR EPITHELIUM CALCIFICATION OF VASCULAR WALL	* *	* *
	LIVER		- 10,6	DEGENERATION OF HEPATIC PLASTIC NODULE GRANULOMA	CELLS + + +	
			ī	WITH FIBROSIS INFILTRATION OF LEUCOCYTES	*	
	PANCREAS		4	ATROPHY OF PANCREATIC ACINUS	+	
	TESTES	NODULE (BILATERAL)	+++	LEYDIG CELL TUMOR (BILATERAL)		
	PROSTATIC GLAND		I	INFLAMMATION	÷	
	SEMINAL VESICLE	ATROPHY	+++ A	АТКОРНҮ	. +	
	HARDERIAN GLANDS		H	INFILTRATION OF LEUCOCYTES (UNILATERAL)	÷	
	BRAIN		<u>а</u> .	PIGMENTATION	+	
1) FATE: Y	. KILLED ON SCHEDULE		NEGATIVE N	NOT PRESENTED 3) GRAHT	DE OF MASS:	: : : : : : : : : : : : : : : : : : :
4) DAYS : A	AFTER START OF TREATMENT		++ , MODE +++ , SEVE	TE C		

11-M1-0034 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL: IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE ОРРМ LEVEL AND SEX :

STUDY NO. 83004

HEART	ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	TOPATHOL	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
HYPERPLASIA OF EPITHELIAL HYPERPLASIA OF EPITHELIAL HILUS) ENLARGEMENT H++ PROLIFERATION OF RETICULAR CELLS H++ ACTIVATION OF HEMATOPOIESIS AVITY HEMORRHAGE H+ GRANULOMATOUS PNEUMONIA FALLOWISH CHANGE H++ FATTY DEGENERATION OF HEPATIC CELLS H++ FROUGHNESS OF SURFACE H++ FROUGHNESS OF SURFACE H++ FROUGHNESS OF SURFACE H++ GRANULOMATOUS PNEUMONIA H++ FATTY DEGENERATION OF HEPATIC CELLS H++ FATTY DEGENERATION OF HEPATIC CELLS H++ FROUGHNESS OF SURFACE H++ GRANULOMEPHROPATHY (BILATERAL) CHRONIC PROGRESSIVE CHRONIC PROGRESSIVE H++ GLOWERULONEPHROPATHY (BILATERAL)		686	MULTIPLE ORGANS			MONONUCLEAR CELL LEUKEMIA	! ! ! !	LEYDIG CELL TUMOR: TESTES
HYPERPLASIA OF EPITHELIAL RETICULUM CELLS HILUS ENLARGEMENT H++ PROLIFERATION OF RETICULAR CELLS H++ ACTIVATION OF HEMATOPOIESIS H++ ACTIVATION OF HEMATOPOIESIS H++ ALTIVATION OF HEMATOPOIESIS H++ HEMORRHAGE H++ HEM			HEART	•		FIBROSIS	+	CORTICAL TUMOR: ADRENAL GLANDS
ENLARGEMENT +++ PROLIFERATION OF RETICULAR CELLS ++ RROW AVITY HEMORRHAGE *++ GRANULOMATOUS PNEUMONIA ++ FALLOWISH CHANGE *++ FATTY DEGENERATION OF HEPATIC CELLS +++ ROUGHNESS OF SURFACE ++ PROLIFERATION OF HEPATIC CELLS +++ PROLIFERATION OF HEMOSIDERIN-LADEN ++ **ATROPHY OF PANCREATIC ACINUS +++ CELLS CHRONIC PROGRESSIVE +++ GLOMERULONEPHROPATHY (BILATERAL) +++ **ATROPHY OF PANCREATIC ACINUS +++ CHRONIC PROGRESSIVE ++++ CHRONIC PROGRESSIVE ++++ CHRONIC PROGRESSIVE ++++ CHRONIC PROGRESSIVE ++++++++++++++++++++++++++++++++++			THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	MONONUCLEAR CELL LEUKEMIA : MULTIPLE.ORGANS GRANULOMATOUS PNEUMONIA
ACTIVATION OF HEMATOPOIESIS + OSTEOGENESIS + HEMORRHAGE ++ GRANULOMATOUS PNEUMONIA +++ YELLOWISH CHANGE ++ HEMORRHAGE +++ ROUGHNESS OF SURFACE + PROLIFERATION OF HEPATIC CELLS +++ ROUGHNESS OF SURFACE + PROLIFERATION OF HEMOSIDERIN-LADEN ++ CELLS ATROPHY OF PANCREATIC ACINUS +++ GLOMERULONEPHROPATHY (BILATERAL) +++ CHRONIC PROGRESSIVE +++ GLOMERULONEPHROPATHY (BILATERAL) +++ CHRONIC PROGRESSIVE +++ CHRONIC			LYMPH NODES (PULM.HILUS) SPLEEN	ENLARGEMENT ENLARGEMENT	+ + + + + +	PROLIFERATION OF RETICULAR CELLS	+	: LUNG CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY : KIDNEYS
AVITY HEMORRHAGE +++ YELLOWISH CHANGE +++ ROUGHNESS OF SURFACE YELLOWISH CHANGE + YELLOWISH CHANGE +	•		BONE MARROW			ACTIVATION OF HEMATOPOIESIS OSTEOGENESIS	+ +	
HEMORRHAGE YELLOWISH CHANGE +++ ENLARGEMENT ROUGHNESS OF SURFACE YELLOWISH CHANGE + YELLOWISH CHANGE +			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	. +	
ENLARGEMENT +++ ROUGHNESS OF SURFACE + YELLOWISH CHANGE +			LUNG	HEMORRHAGE YELLOWISH CHANGE	+ + + + +	GRANULOMATOUS PNEUMONIA HEMORRHAGE	+ + + +	•
S CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)			LIVER	11.		FATTY DEGENERATION OF HEPATIC CELL: PROLIFERATION OF BILE DUCT MIGRATION OF HEMOSIDERIN-LADEN CELLS	+ + + + + + •	
CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)			PANCREAS		9	OF PANCREATIC	+ +	
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+ + +	

3) GRADE OF MASS:	A , SMALL AND/OR SINGULAR	B . MEDIAL AND/OR SPORADIC	C . LARGE AND/OR MULTIPLE
2) GRADE : NEGATIVE NOT PRESENTED	+ > SLIGHT	++ / MODERATE	+++ SEVERE
1) FATE : W / KILLED IN EXTREMIS			4) DAYS : AFTER START OF TREATMENT

CONTINUED 11-M1-0034 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY . , OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE О РРМ LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					1 1 1 1 1			STUDY NO. 83004
ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
7500	3	686	KIDNEYS					
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (RILATERAL)	+ + +	
						VACUOLAR DEGENERATION (BILATERAL)	++	,
			TESTES	ATROPHY (UNILATERAL)	+	LEYDIG CELL TUMOR (BILATERAL)		
				NODULE (BILATERAL)	+ +			
			SEMINAL VESICLE		-	ATROPHY	+	
			ADRENAL GLANDS	ENLARGEMENT (UNILATERAL)	+ + +	CORTICAL TUMOR (UNILATERAL)		
			MAMMARY GLAND		J	DILATATION OF GLAND	+	
			BRAIN			PIGMENTATION	+	

4) DAYS : AFTER START OF TREATMENT 1) FATE : W . KILLED IN EXTREMIS

2) GRADE : NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

3) GRADE OF MASS:

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM.

ANIMAL

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MALE

1	1			! ! ! ! !			STUDY NO. 83004
1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL 'FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
>-	735	HEART			FIBROSIS	+	LEYDIG CELL TUMOR: TESTES
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	ADENOMA: MAMMARY GLAND
		LYMPH NODES			BLOOD ABSORPTION	+	•
		SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	÷ + +	
		BONE MARROW			OSTEOGENESIS	*	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	4	
		LUNG			CALCIFICATION OF VASCULAR WALL	+	•
		LIVER			FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES SMALL GRANULOMA	++ ++	
		PANCREAS	-		ATROPHY OF PANCREATIC ACINUS	+	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + + + + +	
		TESTES	NODULE (BILATERAL)	* + +	LEYDIG CELL TUMOR (BILATERAL)		

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

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ANIMAL 1) 4) NUMBER FATE DAYS	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	! ! ! !					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PAIHOLOGICAL FINDINGS
0035	>-	735	PROSTATIC GLAND NODULE	NODULE	+ + +	HYPERPLASIA OF MUCOSAL EPITHELIUM	+	
ŀ			SEMINAL VESICLE	АТВОРНУ	1 +++	АТКОРНҮ	+	
			PITUITARY GLAND	HEMORRHAGE	+	HEMORRHAGE	+	
			MAMMARY GLAND		4	ADENOMA DILATATION OF GLAND	+	
			BRAIN		ū.	PIGMENTATION	+	
			SPINAL CORD		а.	PIGMENTATION	+	

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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11-M1-0036 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

					! ! ! ! !			STUDY NO. 83004
ANIMAL F NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0036	>-	735	HEART			FIBROSIS INFILTRATION OF LFHCOCYTES	+ -	LEYDIG CELL TUMOR: TESTES
			THYMUS		ī.	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+ +	
			LYMPH NODES (PULM.HILUS)		18	BLOOD ABSORPTION	+ +	
			SPLEEN		O H M	CONGESTION HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
			BONE MARROW		08	OSTEOGENESIS	+	
			NASAL CAVITY		NI .	INFILTRATION OF LEUCOCYTES	+	
			LUNG		CA	CALCIFICATION OF VASCULAR WALL	+	
			LIVER		FA S S S S S S S S S S S S S S S S S S S	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA INFLLTRATION OF LEUCOCYTES CHOLANGIOFIBROSIS	+++++	
		~	PANCREAS		AT	ATROPHY OF PANCREATIC ACINUS	+	
		-	KIDNEYS		.H.O	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+ +	

4) DAYS : AFTER START OF TREATMENT 1) FATE: Y X KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

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CONTINUED 11-M1-0036 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL: IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

1 1 1	1 1 1 1			1		 	STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) TE DA	4) ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0036	Y 735	SS KIDNEYS			PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
		TESTES	NODULE (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
		PROSTATIC GLAND	۹۶		INFLAMMATION	+	
		SEMINAL VESICLE	LE ATROPHY	+ + +	АТВОРНҮ	+	
		THYROID GLANDS	6		HYPERPLASIA OF C-CELLS (UNILATERAL)	AL) +	
		BRAIN			PIGMENTATION	+	

3) GRADE OF MASS: 2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE 4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

3) GRADE OF MASS :

11-M1-0037 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL: IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

; ; ; ; ; ;	! ! !			 			STUDY NO. 83004
ANIMAL FA.	1) FATE DA	4) ORGAN DAYS	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0037	Y 73	735 MULTIPLE ORGANS	σ		MONONUCLEAR CELL LEUKEMIA		G CELL
		HEART			FIBROSIS	+	CELL LE ORGANS
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	ADENOMA: PITUITARY GLAND
		LYMPH NODES	ENLARGEMENT	+			
		LYMPH NODES	ENLARGEMENT	+			
		SPLEEN	ENLARGEMENT ROUGHNESS OF SURFACE	+ + + +	RUPTURE HEMORRHAGE NECROSIS CONGESTION CAPSUL TIS	+ + + + + + + + + + +	
					9	-	
		BONE MARROW			ACTIVATION OF HEMATOPOIESIS OSTEOGENESIS	+ +	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LUNG	ENLARGEMENT	+	CALCIFICATION OF VASCULAR WALL	+	
		LIVER	ROUGHNESS OF SURFACE	9 +	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS MIGRATION OF HEMOSIDERIN-LADEN CELLS	+ + + + + · · · · · · · · · · · · · · ·	

4) DAYS : AFTER START OF TREATMENT

1) FATE: Y X KILLED ON SCHEDULE

CONTINUED 11-M1-0037 APPENDIX

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CHRONIC AND CARCINDGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

		1						STUDY NO. 83004
ANIMAL	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
2500	>-	735	LIVER				1	PATHOLOGICAL FINDINGS
				•		SWELLING OF KUPFFER CELLS	+	
			PANCREAS			ATROPHY OF PANCREATIC ACINUS FIBROSIS	+ +	
			KIDNEYS	GRAYISH CHANGE (BILATERAL)	++	CHRONIC PROGRESSIVE GLOMERUIONEPHRODATUS (51, 1775)	+ + +	
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
						NECROSIS (BILATERAL)	++++	
			TESTES	SOFTENING (BILATERAL)	+	ATROPHY (UNILATERAL) LEYDIG CELL TUMOR (UNILATERA!)	: + : +	
			SEMINAL VESICLE	АТВОРНУ	++	АТВОРНУ	-	
٠			PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ +	ADENOMA	+	
			ADRENAL GLANDS		-	VACUOLAR DEGENERATION OF CORTICAL CELLS (UNILATERAL)	+	
			MAMMARY GLAND			DILATATION OF GLAND	+	
			BRAIN	IMPRESSION	Q +	DILATATION OF CEREBRAL VENTRICLE	. +	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

A - SMALL AND/OR SINGULAR B - MEDIAL AND/OR SPORADIC C - LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

APPENDIX 11-M1-0038

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

AN I MAL NUMBER

0038

							STUDY NO. 83004
1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
> -	735	THYMUS	4·		HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	LEYDIG CELL TUMOR: TESTES
		LYMPH NODES			BLOOD ABSORPTION	+	
		SPLEEN SPLEEN			HEMOSIDEROSIS	+	-
		BONE MARROW			OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	*	
		LUNG			CALCIFICATION OF VASCULAR WALL	+	
		LIVER	NODULE	• · · · · · · · · · · · · · · · · · · ·	FATTY DEGENERATION OF HEPATIC CELLS HYPERPLASTIC NODULE FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + + +	
		PANCREAS			ATROPHY OF PANCREATIC ACINUS	+ +	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	* +	
	,	TESTES	NODULE (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
		PROSTATIC GLAND			HYPERPLASIA OF MUCOSAL EPITHELIUM	+	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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3) GRADE OF MASS:
A × SMALL AND/OR SINGULAR
B × MEDIAL AND/OR SPORADIC
C × LARGE AND/OR MULTIPLE

2) GRADE: NEGATIVE NOT PRESENTED
+ ' SLIGHT
++ MODERATE
++ ' SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

CONTINUED
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APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE PPM 0 LEVEL AND SEX :

STUDY NO. 83004

	PROBABLE CAUSE OF DEATH OR MAJOR	raihoLogical Findings						
[2) GRADE	+			·			
HISTOPATHOLOGICAL	FINDINGS	 АТRОРНҮ						
2)3)	GRADE	¥ ++				•.	÷	
GROSS PATHOLOGICAL	FINDINGS	AT						
ORGAN		VESICLE						
(7 %	0.413	735						
1)		>-						
ANIMAL	NUMBER	0038						

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULIPLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE M P P M LEVEL AND SEX :

	!!!!!!!!!!!!	! ! !						STUDY NO. 83004
ANIMAL F,	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0039	>	726	2				1	PATHOLOGICAL FINDINGS
			0000		Ι	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	TESTE
			SPLEEN		x	HEMOSIDEROSIS	+	ADENUMA: PITUITARY GLAND
			BONE MARROW		4 0	ACTIVATION OF HEMATOPOIESIS OSTEOGENESIS	. + +	
			NASAL CAVITY		I	INFILTRATION OF LEUCOCYTES	- + - +	
			LARYNGOPHARYNX		Ü	CYSTIC DILATATION OF GLAND	+	
			Lung		V V	ADENOMATOSIS CALCIFICATION OF VASCULAR WAL!	+ +	
			LIVER		T T U	FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS EXTRAMEDULLARY HEMATODOTESTS	++	·
		•			CH		+ + +	
		<u>-</u>	KIDNEYS		CH G G INI	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
		-	TESTES	NODULE (BILATERAL) ENLARGEMENT (BILATERAL)	+++ ++	LEYDIG CELL TUMOR (BILATERAL)		

4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

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3) GRADE OF MASS:

CONTINUED 11-M1-0039 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1 1 1 1 1						STUDY NO. 83004
ANIMAL 1) 4)	1)	(7 %	ORGAN	GROSS PATHOLOGICAL	2)3)	HISTODATHOLOGYCA:		
NUMBER	J - 4 - 1	1 1 1		FINDINGS	GRADE	FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
6200	>-	736	PROSTATIC GLAND		! ! ! ! !	INFLAMMATION	+	TOUR CONTRACT OF THE TRACTOR OF THE
						HYPERPLASIA OF MUCOSAL EPITHELIUM	+	
			SEMINAL VESICLE	АТВОРНУ	++++	АТВОРНҮ	++	
			PITUITARY GLAND			ADENOMA		
			ADRENAL GLANDS		-	VACUOLAR DEGENERATION OF COBITCA!	-	
					·	CELLS (UNILATERAL)	ŀ	
						inficiration of Leucocytes (Unicateral)	+	
			SKIN	SCAB	+	KERATOSIS	+	
			SKIN (SUBCUTIS)	NODULE	+	INFLAMMATION	+	
			MAMMARY GLAND		J	DILATATION OF GLAND	+	

2) GRADE : NEGATIVE NOT PRESENTED 1) FATE : Y , KILLED ON SCHEDULE

+ / SLIGHT ++ / MODERATE +++ / SEVERE

4) DAYS : AFTER START OF TREATMENT

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3) GRADE OF MASS:
A 'SMALL AND/OR SINGULAR
B 'MEDIAL AND/OR SPORADIC
C 'LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL. IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

! ! ! ! ! ! !		1					 	STUDY NO. 83004
ANIMAL FA NUMBER	1) FATE DA	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0700	۲ /	736	HEART		11 		 	
			THYMUS		±	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	· +	LETVIG CELL IUMOR: TESTES ADENOMA: PITUITARY GLAND
			SPLEEN		OI	CONGESTION HEMOSIDEROSIS	+ +	
		_	BONE MARROW		0	OSTEOGENESIS	- 4	
		-	NASAL CAVITY		н	INFILTRATION OF LEUCOCYTES	- +	
		7	LARYNGOPHARYNX	•	U	CYSTIC DILATATION OF GLAND	. 4	
			LUNG		Ü	CALCIFICATION OF VASCULAR WALL	. +	
		7	LIVER		T 8 (F)	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA EXTRAMEDIII ADV DEMATORATECT	+ +	
					ių n	PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	++ +	
		×	KIDNEYS		CH CH	ATERAL)	· + +	·
		-	TESTES	ENLARGEMENT (BILATERAL)	+++	LEYDIG CELL TUMOR (BILATERAL)		
	1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE

4) DAYS : AFTER START OF TREATMENT

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3) GRADE OF MASS:

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

						 	STUDY NO. 83004
ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0041 Y	736	THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	; ; ; ; ; ; ; ;	LEYDIG CELL TUMOR: TESTES
		SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
		BONE MARROW			OSTEOGENESIS	+	
		רתאפ			ADENOMATOSIS OSSEOUS TISSUE CALCIFICATION OF VASCULAR WALL	+ + +	
		LIVER	NODULE	+	FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + + S	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	
		TESTES	ENLARGEMENT (BILATERAL) NODULE (BILATERAL)	+ + + + + +	LEYDIG CELL TUMOR (BILATERAL)		
		PROSTATIC GLAND			HYPERPLASIA OF MUCOSAL EPITHELIUM	+	
	 	SEMINAL VESICLE	АТВОРНУ	+ + +	АТКОРНУ	+	
1) FATE 4) DAYS	Y . AFTE	Y . KILLED ON SCHEDULE AFTER START OF TREATMENT	ILE 2) GRADE MENT	. NEGA	NOT PRESENTED 3) GRAD	E OF MASS SMALL AND MEDIAL AN	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

1) FATE : Y , KILLED ON SCHEDULE 4) DAYS : AFTER START OF TREATMENT

STUDY NO. 83004

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE

O PPM

LEVEL AND SEX :

ORGAN

ANIMAL 1) 4) FATE DAYS

NUMBER

0041

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11-M1-0041

APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL: IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE ОРРМ LEVEL AND SEX :

: : : : : : : : : : : : : : : : : : :						STUDY NO. 83004
ANIMAL 1) 4) NUMBER	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	THOLOGICAL FINDINGS	2) GRADE	PROBABLE C F DEATH OR HOLOGICAL F
0042 Y 736	НЕАКТ		- -	EMOSIDE	 	LEYDIG CELL TUMOR: TESTES
	THYMUS		-	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+ +	
	SPLEEN			CONGESTION HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
	BONE MARROW		Ü	OSTEOGENESIS	+	
	NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
	LUNG		O	CALCIFICATION OF VASCULAR WALL	+	
	LIVER		TT.NT H	FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+++++	
	PANCREAS		A	ATROPHY OF PANCREATIC ACINUS	+	
	KIDNEYS		O	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+ +	

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS: 2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE 4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

104	AUSE MAJOR INDINGS							
STUDY NO. 83004	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS		·					
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2) GRADE	 		+	+ +	AL) +	+	+
	HISTOPATHOLOGICAL FINDINGS	PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	LEYDIG CELL TUMOR (BILATERAL)	INFLAMMATION	АТКОРНҮ	HYPERPLASIA OF C-CELLS (UNILATERAL)	PIGMENTATION	PIGMENTATION
1 1 1 1 1 1 1 1 1	2)3) GRADE		+ + + + + +		+++	工	Δ.	a .
	GROSS PATHOLOGICAL FINDINGS		ENLARGEMENT (BILATERAL) NODULE (BILATERAL)		АТВОРНУ			
	ORGAN	KIDNEYS	TESTES	PROSTATIC GLAND	SEMINAL VESICLE	THYROID GLANDS	BRAIN	SPINAL CORD
1 1 1 1 1	ANIMAL 1) 4) NUMBER	736						
1	FATE	>						
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ANIMAL NUMBER	0042						

4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

A COMPANIES OF THE CONTRACT OF THE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

о РРМ LEVEL AND SEX :

0043

STUDY NO. 83004

1	1 1 1			!			
1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
. ≫	701	HEART			FIBROSIS	* *	TRANSITIONAL CELL
		SPLEEN	ENLARGEMENT	+ +	EXTRAMEDULLARY HEMATOPOIESIS	+ +	CARCINOMA: KIDNEYS
		BONE MARROW			ACTIVATION OF HEMATOPOIESIS OSTEOGENESIS	+ +	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LARYNGOPHARYNX			CYSTIC DILATATION OF GLAND	+	
		LUNG	ADHESION	*	ALVEOLITIS PLEURISY CALCIFICATION OF VASCULAR WALL	+ + +	
		LIVER			FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	** *	
		KIDNEYS	MASS (UNILATERAL)	ပ	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (UNILATERAL) TRANSITIONAL CELL CARCINOMA (UNILATERAL)	÷	
		TESTES	ATROPHY	+ + +	ATROPHY (BILATERAL) HYPERPLASIA OF LEYDIG CELLS (UNILATERAL)	+ + + +	
		ADRENAL GLANDS			VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	+,	

1) FATE : W , KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + / SLIGHT ++ / MODERATE +++ / SEVERE

A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

			STUDY NO. 83004	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS		
				2) GRADE	i ! ! ! ! ! ! !	
CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	INDIVIDUAL PATHOLOGICAL FINDINGS	LEVEL AND SEX : O PPM MALE		GROSS PATHOLOGICAL 2)3) HISTOPATHOLOGICAL FINDINGS GRADE FINDINGS		
				ORGAN	MAMMARY GLAND	
) 4) E DAYS	701	
				ANIMAL 1) 4) NUMBER	0043 W	

1) FATE : W / KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

CONTINUED

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APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL, IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE О РРМ LEVEL AND SEX :

		1 1 1						STUDY NO. 83004
ANIMAL F NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
7700	×	581	LYMPH NODES					THE PROPERTY OF THE PROPERTY O
			(PULM.HILUS)			BLOOD ABSORPTION	+	ADENOMA: PITUITARY GLAND
		,	S P L E E E			EXTRAMEDULLARY HEMATOPOIESIS HEMOSIDEROSIS	+ +	
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
			LUNG	CONGESTION	++++	CALCIFICATION OF VASCULAR WALL	+	
			LIVER			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-	
					- •	FOCAL ATROPHY OF HEPATIC CELLS	+ + S	
						SMALL GRANULOMA PROLIFERATION OF BILF DUCT		•
						WITH FIBROSIS	+ + .	
					•	INFILTRATION OF LEUCOCYTES	+	
			PANCREAS		4	ATROPHY OF PANCREATIC ACINUS	+	
			KIDNEYS		Ο ,.	CHRONIC PROGRESSIVE	+ +	
					u.	PIGMENTATION (BILATERAL)	+	
			PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + + +	ADENOMA		
		_	BRAIN	IMPRESSION	: : +	HEMORRHAGE	4	

1) FATE : X , FOUND DEAD

2) GRADE : NEGATIVE NOT PRESENTED
+ ' SLIGHT
++ MODERATE
++ ' SEVERE

4) DAYS : AFTER START OF TREATMENT

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11-M1-0045 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL: IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

	1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		; ; ; ; ; ;	STUDY NO. 83004
ANIMAL 1) FATE D NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0045 Y 7	736	HEART			INFILTRATION OF LEUCOCYTES	+	LEYDIG CELL TUMOR: TESTES
		SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+ + +	
	_ -	LUNG			CALCIFICATION OF VASCULAR WALL	. +	
	_	LIVER			FATTY DEGENERATION OF HEPATIC C SMALL GRANULOMA PROLIFERATION OF BILE DUCT	CELLS +	
	. —	PANCREAS			ATROPHY OF PANCREATIC ACINUS INFILTRATION OF LEUCOCYTES	+ +	
	~	KIDNEYS		*.	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	‡ + ‡ - C	
	•	TESTES	ENLARGEMENT (UNILATERAL) NODULE (UNILATERAL) SOFTENING (UNILATERAL)	+ +: + + + + +	LEYDIG CELL TUMOR (UNILATERAL) ATROPHY (UNILATERAL) PERIVASCULITIS (UNILATERAL)	. + +	
	J ,	SEMINAL VESICLE	ATROPHY	++	АТКОРНУ	+	
	-	HARDERIAN GLANDS			INFLAMMATION (UNILATERAL)	+	
1) FATE: 4) DAYS:	Y Y A F T E	KILLED ON SCHEDULE R START OF TREATMENT	E 2) GRADE ENT	N H H H H H H H H H H H H H H H H H H H	PRESENTED 3)	GRADE OF MASS A SMALL AN B MEDIAL A	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

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CONTINUED	
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APPENDIX	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

STUDY NO. 83004

PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS						
2) GRADE	! ! ! ! ! ! ! ! !		х [*]			
.2)3) HISTOPATHOLOGICAL GRADE FINDINGS	PIGMENTATION					3
GROSS PATHOLOGICAL FINDINGS						
ORGAN	BRAIN					
4) DAYS	736				٠	
1) FATE	>-					
ANIMAL NUMBER	0045					

APPENDIX 11-M1-0046

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

ANIMAL

9700

	1 0				
UKGAN	GRUSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
MULTIPLE ORGANS			MONONUCLEAR CELL LEUKEMIA		MONONUCLEAR CELL LEUKEMIA
HEART			FIBROSIS	+	: MULTIPLE ORGANS LEYDIG CELL TUMOR: TESTES
THYMUS	-		HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	C-CELL ADENOMA: THYROID GLANDS
SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
BONE MARROW			OSTEOGENESIS ACTIVATION OF HEMATOPOIESIS	+ +	
NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
LUNG			CALCIFICATION OF VASCULAR WALL	+	
LIVER		- ,	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT	+ + +	
			Win Fibrusis Infiltration of Leucocytes	+	
PANCREAS			ATROPHY OF PANCREATIC ACINUS	++	
KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	
TESTES	ENLARGEMENT (BILATERAL)	++	LEYDIG CELL TUMOR (BILATERAL)		

1) FATE : Y , KILLED ON SCHEDULE 2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT + , MODERATE + , MODERATE + , SEVERE + + , SEVERE

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A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE

3) GRADE OF MASS ::

CONTINUED
11-M1-0046
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM

MALE

	1 1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		! ! ! !			STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) ATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	THOLOGICAL FINDINGS		PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
9700	> -	736	TESTES	ULE	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !		 	
			PROSTATIC GLAND			HYPERPLASIA OF MUCOSAL EPITHELIUM	+	
			SEMINAL VESICLE	ATROPHY	+ + +	АТКОРНУ	+ +	
			THYROID GLANDS	ENLARGEMENT (UNILATERAL)	+ + +	C-CELL ADENOMA (UNILATERAL)		
			ADRENAL GLANDS			VACUOLAR DEGENERATION OF CORTICAL CELLS (UNILATERAL)	+	
			BRAIN			PIGMENTATION	+	

1) FATE : Y , KILLED ON SCHEDULE 2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT

4) DAYS : AFTER START OF TREATMENT

APPENDIX 11-M1-0047

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL: IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL

MALE
O PPM
SEX
AND
EL

			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	4) ORGAN YS	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0047 Y 736	HEART		u.	FIBROSIS	+	IG CE
	LYMPH NODES		6 0	BLOOD ABSORPTION	+	
	SPLEEN		Ξ W	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
	BONE MARROW		0	OSTEOGENESIS	+	
	NASAL CAVITY		I	INFILTRATION OF LEUCOCYTES	+	
	LARYNGOPHARYNX		S	CYSTIC DILATATION OF GLAND	+	
	LUNG		ပ	CALCIFICATION OF VASCULAR WALL	+	
	LIVER		**************************************	HYPERPLASTIC NODULE FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES FATTY DEGENERATION OF HEPATIC CELLS	-+++++	
	PANCREAS		V	ATROPHY OF PANCREATIC ACINUS	+ +	
	KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
	TESTES	ENLARGEMENT		G CELL TUMOR (BILATERAL)		
1) FATE : Y 4) DAYS : AF	ED ON SCHE	2) GRADE :	. NEGATIVE NOT + SLIGHT ++ MODERATE +++ SEVERE	NOT PRESENTED 3) GRAD IT A . RATE B . C .	E OF MASS SMALL ANI MEDIAL AI	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

3) GRADE OF MASS:

CONTINUED 11-M1-0047 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

1 1 1 1 1 1	1 1 1 1 1							
					1		1 1 1 1 1 1 1	SIUDY NO.
ANIMAL 1) 4)	1) FATE	4 4 7	ORGAN	GROSS PATHOLOGICAL	2)3)	HISTOPATHOLOGICAL		
NUMBER	- - 1	2		FINDINGS	GRADE	FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !		!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			PATHOLOGICAL FINDINGS
0047	>-	736	TESTES	(BILATERAL) NODULE (BILATERAL)	4 4 4			
					+ + +			
			PROSTATIC GLAND		H	INFLAMMATION		
							+	
			SEMINAL VESICLE	ATROPHY	+++	АТВОРНҮ	4	
			HARDERIAN GLANDS		Ħ	INFILTRATION OF LEUCOCYTES	- +	
						(UNILATERAL)		
			BRAIN		ā.	PIGMENTATION	-	
							-	
			SPINAL CORD		P.	PIGMENTATION	+	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

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11-M1-0048 APPENDIX CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL, IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE M P P M LEVEL AND SEX :

	1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) NUMBER	1) 4) FE DAYS	S ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0048 Y	736				BLOOD ABSORPTION	+	LEYDIG CELL TUMOR: TESTES
		SPLEEN			CONGESTION HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
		BONE MARROW		Ü	OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		rung			CALCIFICATION OF VASCULAR WALL	+	
		LIVER			FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS ANGIECTASIA SMALL GRANULOMA. CHOLANGIOFIBROSIS INFILTRATION OF LEUCOCYTES	+++++	
		PANCREAS		I :	INFILTRATION OF LEUCOCYTES	+	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
		TESTES	ENLARGEMENT (BILATERAL)	++	LEYDIG CELL TUMOR (BILATERAL)		

3) GRADE OF MASS:	A . SMALL AND/OR SINGULAR	B , MEDIAL AND/OR SPORADIC	C > LARGE AND/OR MULTIPLE
2) GRADE : NEGATIVE NOT PRESENTED	+ SLIGHT	++ , MODERATE	+++ SEVERE
1) FATE : Y , KILLED ON SCHEDULE			4) DAYS : AFTER START OF TREATMENT

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IIMAL FA IMBER	1) TE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR	
78	~	736	TESTES		! ! ! ! !			PATHOLOGICAL FINDINGS	
			SEMINAL VESICLE	ATROPHY	+ + + + + +	АТКОРНУ	+		
					÷				
1) FAT		×	KILLED ON SCHEDULE	. 50400 (0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
4) DAYS	••	AFTER	START OF	. + + + + + + + + + + + + + + + + + + +	· NEGALIVE NOT I + · SLIGHT ++ · MODERATE +++ · SEVERE	NOT PRESENTED IT ATE :e	3) GRADE OF MASS: A \ SMALL AND/C B \ MEDIAL AND/C C \ LARGE AND/C	E OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE	

STUDY NO. 83004

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

. INDIVIDUAL PATHOLOGICAL FINDINGS

MALE

О РРМ

LEVEL AND SEX :

ANIMAL NUMBER

0048

CONTINUED

11-M1-0048

APPENDIX

3) GRADE OF MASS:

2) GRADE : NEGATIVE NOT PRESENTED

+ / SLIGHT ++ / MODERATE +++ / SEVERE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

1 1 1 1 1	!	1 1 1			1			STUDY NO. 83004
ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
6700	3	729	HEART				! ! ! ! ! ! +	C-CÉLL ADENOMA: THYROTD
			THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	GLANDS NEUROBLASTOMA: ADRENAL GIANDS
			SPLEEN			CONGESTION HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + + +	PHEOCHROMOCYTOMA: ADRENAL GLANDS ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
			LUNG			CALCIFICATION OF VASCULAR WALL	+	
			LIVER	DISCOLORATION	+	SMALL GRANULOMA PROLIFERATION OF BILE DUCT INFILTRATION OF LEUCOCYTES	+ + +	
			PANCREAS			ATROPHY OF PANCREATIC ACINUS	+	
			KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL) CYST (UNILATERAL)	+ +	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL) CYST (UNILATERAL)	+ + + +	
			TESTES	ENLARGEMENT (UNILATERAL) ATROPHY (UNILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		

1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

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CONTINUED	
11-M1-0049	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE O PPM LEVEL AND SEX :

							. •	STUDY NO. 83004
ANIMAL	FA15	1) 4) FATE DAYS	ORGAN¸	ATHO FI	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PRÓBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
6700	3	729	TESTES	NODULE (BILATERAL)	+ + +			
			PROSTATIC GLAND	ATROPHY	+ + +			
			SEMINAL VESICLE	ATROPHY	+ + +	АТВОРНУ	++	
			PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + +	ADENOMA		
			THYROID GLANDS	ENLARGEMENT (UNILATERAL)	+ + +	C-CELL ADENOMA (UNILATERAL)		
			ADRENAL GLANDS	ENLARGEMENT (UNILATERAL)	+ +	NEUROBLASTOMA (BILATERAL) PHEOCHROMOCYTOMA (UNILATERAL)	·	
			MAMMARY GLAND			DILATATION OF GLAND	+	
			BRAIN	IMPRESSION	+	PIGMENTATION	+	

4) DAYS : AFTER START OF TREATMENT

1) FATE : W . KILLED IN EXTREMIS

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

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APPENDIX 11-M1-0050

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

1) FATE

ANIMAL F NUMBER 3

0020

	!		!	7 5 7)	-														
STUDY NO. 83004	PROBABLE CAUSE OF DEATH OR MAJOR	PATHOLOGICAL FINDINGS		F	FIBROMA: TONGUE															
1	2) GRADE			+	+	. +	. +		+	+		+		+ + +	+	. :	+	+	+	4
	HISTOPATHOLOGICAL FINDINGS		01000010	500010	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	CONGESTION	HEMOSIDEROSIS	OSTEOGENESIS	TNET! TRATITOR OF . TOOLOGE	THE STATE OF LEGICOCYTES	FIBROMA	INFILTRATION OF LEUCOCYTES (UNILATERAL)		FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS	INFILTRATION OF LEUCOCYTES	<u>u</u>	002402	CHRONIC PROGRESSIVE GLOMFRII ONEPHRODATUV (BT. ATT.)	PIGMENTATION (BILATERAL)	<pre>contraction or LeucocyTes</pre>
	2)3) GRADE										¥			+				٠		
	GROSS PATHOLOGICAL FINDINGS										MASS			UISCULORATION						
	ORGAN		HEART	,	S O W & H -	SPLEEN		BONE MARROW	NASAL CAVITY	TONGLE		SUBLINGUAL GLANDS	4 1 7 1 1	1 - - - -		PANCREAS	KIDNEYO) - - - - - - - - - - - - - - - - - - -		
	4) DAYS		902								•									

4) DAYS : AFTER START OF TREATMENT

1) FATE : W / KILLED IN EXTREMIS

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

T PRESENTED 3) GRADE OF MASS:
A \ SMALL AND/OR SINGULAR
B \ MEDIAL AND/OR SPORADIC
C \ LARGE AND/OR MULTIPLE

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CONTINUED	OLOGICAL STUDY
11-M1-0050	AND CARCINOGENIC INHALATION TOXICOLOGICAL SOMETHANOL IN FISCHER RAT
APPENDIX	CARCINOGENIC OF METHANOL
	AND
	CHRONIC AND

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE О РРМ LEVEL AND SEX :

STUDY NO. 83004	2) PROBABLE CAUSE DE OF DEATH OR MAIOR	1 d		
1	2) GRADE		+	+ +
	HISTOPATHOLOGICAL FINDINGS		CALCIFICATION (UNILATERAL) LEYDIG CELL TUMOR (BILATERAL)	ATROPHY PIGMENTATION
1	2)3) GRADE		+ + + + + +	∢ Œ
1	GROSS PATHOLOGICAL FINDINGS		ENLARGEMENT (BILATERAL) NODULE (BILATERAL)	
	ORGAN	706 KIDNEYS	TESTES	SEMINAL VESICLE BRAIN
!	4) DAYS	706 K		
! ! ! !	1) FATE	 3 		
1 1 1 1 1 1	ANIMAL 1) 4) FATE DAYS NUMBER	0020		

1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE

APPENDIX 11-M1-0051

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL: IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 0 PPM MALE

ANIMAL NUMBER

0051

1	1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		 		1	STUDY NO. 83004
1) FATE	4) DAYS	O R G A N	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	, PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
>-	736	HEART				. +	OR: TEST
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
		SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
		BONE MARROW			OSTEOGENESIS	+	
		LARYNGOPHARYNX			CYSTIC DILATATION OF GLAND	+	
		LUNG	NODULE	+	ADENOMATOSIS CALCIFICATION OF VASCULAR WALL	+ +	
		LIVER			FOCAL ATROPHY OF HEPATIC CELLS ANGIECTASIA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES FATTY DEGENERATION OF HEPATIC CELLS	+++++	
		KIDNEYS		·	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	
		TESTES	NODULE (UNILATERAL) ENLARGEMENT (UNILATERAL)	+ + + + + +	LEYDIG CELL TUMOR (BILATERAL)		

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 2) GRADE : NEGATIVE NOT PRESENTED . + . SLIGHT ++ . MODERATE +++ . SEVERE 4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

1) FATE : Y , KILLED ON SCHEDULE	2) GRADE : NEGATIVE NOT PRESENTED	3) GRADE OF MASS:
	+ > SLIGHT	A . SMALL AND/OR SINGULAR
	++ \ MODERATE	B . MEDIAL AND/OR SPORADIC
4) DAYS : AFTER START OF TREATMENT	+++ SEVERE	C . LARGE AND/OR MILITIPLE

		STUDY NO. 83004	2) PROBABLE CAUSE GRADE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS		+	+
INDIVIDUAL PATHOLOGICAL FINDINGS	O PPM MALE		HISTOPATHOLOGICAL FINDINGS		DILATATION OF GLAND	PIGMENTATION
UAL PATHO	LEVEL AND SEX :	! ! ! !	2)3) GRADE	+ +	Q +++	Δ.
INDIVID	revel A		GROSS PATHOLOGICAL FINDINGS	ATROPHY (UNILATERAL) SOFTENING (UNILATERAL)	ENLARGEMENT	
			ORGAN	736 TESTES	SEMINAL VESICLE ENLARGEMENT	BRAIN
		1 1 1	ANIMAL 1) 4) FATE DAYS NUMBER	736		
		; ; ;	FATE	>-		
		1 1 1 1 1	ANIMAL	0051		

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

CONTINUED

11-M1-0051

APPENDIX

3) GRADE OF MASS:

2) GRADE : NEGATIVE NOT PRESENTED	+	+++ > SEVERE
12 FAIE : W . KILLED IN EXTREMIS	1:::::::::::::::::::::::::::::::::::::	TO CALL ALLER START OF TREATMENT

1) FATE: W / KILLED IN EXTREMIS

APPENDIX 11-M1-0052

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : O PPM

MALE

	1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
					!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!				31UUT NU. 83004
ANIMAL 1) 4)	1)	7 >	ORGAN	GROSS PATHOLOGICAL	ICAL	2) 3)			
NUMBER	A TI	DAYS		FINDI	INGS	GRADE	FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
	; ; ;	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1 1 1 1	1 1 1 1 1 1 1 1			PATHOLOGICAL FINDINGS
0052	3	272 11	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				* * * * * * * * * * * * * * * * * * * *	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
1	:		טר ר ה ה וא			A	АТВОРНУ	+	THE STATE OF
						O T	CONGESTION HEMOSIDEROSIS	+ ;	NO SIGNIFICANI LESION.
								++	
			NASAL CAVITY			I	INFILTRATION OF LEUCOCYTES	+	
			ר ז א ב צ	AIROPHY DISCOLORATION		++	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA PROITEEPATION OF BYIT SHOT	+ + S	
						Ē.	CETTERNION OF BILE DOCT	+	
			KIDNEYS			Ü .	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	

11-M2-0101 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

1 1 1 1 1 1	!	-						
ANIMAL	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0101	3	712	HEART					PATHOLOGICAL FINDINGS
				אַסטרב	+	FIBROSIS	+	C-CELL ADENOMA: THYROTA
			S O W A H -			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	LEYDIG CELL TUMOR: TESTES FIRBOSADEOMA: COM.
			SPLEEN			EXTRAMEDULLARY HEMATOPOIESIS HEMOSIDEROSIS	+ + +	(SUBCUTIS)
			BONE MARROW			ACTIVATION OF HEMATOPOIESIS	- +	
			LUNG		•	SWELLING OF ALVEOLAR EPITHELIUM HFMORRHAGE	. +	
						CALCIFICATION OF VASCULAR WALL	+ +	
			LIVER	DISCOLORATION	+ +	PROLIFERATION OF BILE DUCT WITH FIBROSIS FOCAL ATROPHY OF HEPATIC CELLS HYPERPLASTIC NODULE	+ + -	
			KIDNEYS		2 11	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) (INFILTRATION OF LEUCOCYTES	+ + ++	
		-	TESTES	ATROPHY (UNILATERAL) NODULE (BILATERAL)	7 + + +	LEYDIG CELL TUMOR (BILATERAL)		• ,
			PROSTATIC GLAND			INFLAMMATION	+	

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : W . KILLED IN EXTREMIS

CONTINUED
11-M2-0101
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

РРМ 10 LEVEL AND SEX :

MALE

1 1 1	1				!			STUDY NO. 83004
ANIMAL 1) 4)	(1)	7 7 7	ORGAN	GROSS PATHOLOGICAL	2)3)	HISTOPATHOLOGICAL	 	! ! !
NUMBER	T	UA I V		FINDINGS	GRADE	FINDINGS	GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
		! !					1 1 1 1	PATHOLOGICAL FINDINGS
0101	3	712	SEMINAL VESICLE		A	АТКОРНУ	+	
			THYROID GLANDS			C-CELL ADENOMA (UNILATERAL)		
			ADRENAL GLANDS		>	VACUOLAR DEGENERATION OF CORTICAL CELLS (UNITATERAL)	+	
			SKIN (SUBCUTIS)	MASS	O F	FIBROSARCOMA		
			MAMMARY GLAND		٩	DILATATION OF GLAND	+	
			HARDERIAN GLANDS		Ō	DILATATION OF GLAND (UNILATERAL)	+	

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : W / KILLED IN EXTREMIS

3) GRADE OF MASS:
A * SMALL AND/OR SINGULAR
B * MEDIAL AND/OR SPORADIC
C * LARGE AND/OR MULTIPLE

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11-M2-0102 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

1 !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		1 1 1			1			STUDY NO. 83004
ANIMAL F NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0102	>-	733	SPLEEN	ENLARGEMENT	+			
			LUNG			CALCIFICATION OF VASCULAR		
			LIVER	REDDISH CHANGE	+	WALL WALL	+	
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (RTIATERAL)	+ +	
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES	+ +	
					•	(UNICALEKAL)		
			TESTES	ATROPHY (UNILATERAL)	+			
				NODULE (BILATERAL)	+ + +			
			PROSTATIC GLAND	ATROPHY	+ + +			
			SEMINAL VESICLE	АТВОРНУ	+ + +			
			THYROID GLANDS	ENLARGEMENT (UNILATERAL)	+			
			SKIN	ABSCESS	+ +			
					9			

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE

4) DAYS : AFTER START OF TREATMENT

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					STUDY NO. 8
ANIMAL 1) 4) NUMBER	ORGA	Z	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL ETMOSINGS
				 		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
0103 Y 733	LUNG				CALCIFICATION OF VASCULAR WALL	+	
	LIVER		DISCOLORATION	+			
	KIDNEYS		ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERA!)	+ + +	
					PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
	TESTES		NODULE (BILATERAL)	+ + +			
	SEMINAL	SEMINAL VESICLE	ATROPHY	+ + +			

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4) DAYS : AFTER START OF TREATMENT

3) GRADE OF MASS:

11-M2-0104 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1 1						STUDY NO. 83004
ANIMAL 1) 4)	1	()	ORGAN	GROSS PATHOLOGICAL	2333	HIGHORATION OF THE PERSON OF T	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
NUMBER	۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲	DAYS		FINDINGS	GRADE	FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
010	>	777		!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	! ! ! ! ! !		1	PATHOLOGICAL FINDINGS
†) •		n n	3 r L E E N	ENLARGEMENT	+			
			LUNG			CALCIFICATION OF VASCULAR WALL	4	
			LIVER	DISCOLORATION	+		٠	
			KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (RIIATERAI)	+ +	
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
			TESTES	NODULE (BILATERAL)	+ +			
			PITUITARY GLAND	HEMORRHAGE Enlargement	+ +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

. , 2) GRADE : NEGATIVE NOT PRESENTED

+ SLIGHT ++ MODERATE +++ SEVERE

11-M2-0105 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

ANIMAL 1) 4)						
FATE DAYS NUMBER	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	H	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0105 W 665	HEART			FIBROSIS		
	THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELIS	+ +	FIBRUMA: SKIN (SUBCUTIS) ADENOMA: PITUITARY GLAND
	LYMPH NODES (SUBMAXI.)			INFLAMMATION	+	
	LYMPH NODES (PULM.HILUS)			BLOOD ABSORPTION INCREASE OF PLASMA CELLS	+ + + +	
	SPLEEN	ENLARGEMENT	+	HEMOSIDEROSIS	+	
	NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
	LUNG		3 3	SWELLING OF ALVEOLAR EPITHELIUM OSSEOUS TISSUE CALCIFICATION OF VASCULAR WALL	+ + +	
•	STOMACH		-	HYPERPLASIA OF FORESTOMACH MUCOSAL EPITHELIUM	+	
	LIVER	YELLOWISH CHANGE	+ +	FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS GRANULATION	+ + + +	
	PANCREAS	NODULE	++			
	KIDNEYS	BLACKISH CHANGE (BILATERAL)	5	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+ +	
FATE :	ILLED IN E	S 2) GRADE	NEGATIVE NOT SLIGHT NODERATE	PRESENTED 3) GRADE	OF MASS: SMALL AND/OR S	OR SINGULAR
4) DAYS : AFIER	ER START OF TREATMENT		+++ SEVERE		EDIAL AND ARGE AND/	MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

CONTINUED 11-M2-0105 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

! ! !	! ! !			1			STUDY NO. 83004
ANIMAL 1) NUMBER FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0105 W	999	ΕYS				! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	PATHOLOGICAL FINDINGS
					PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ + +	
		TESTES	ATROPHY (BILATERAL)	+ + +	ATROPHY (BILATERAL)	+ +	
		EPIDIDYMIS	ENLARGEMENT (UNILATERAL)	+ +	HYPERPLASIA OF MUCOSAL EPITHELIUM (BILATERAL) EDEMA (BILATERAL)	+ -	
		PROSTATIC GLAND	АТКОРНҮ	+ + +	INFLAMMATION	+ .	
		SEMINAL VESICLE	АТВОРНУ	+++	АТВОРНУ	+ .	
		PITUITARY GLAND	MASS HEMORRHAGE	A + +	ADENOMA	+ +	
		SKIN (SUBCUTIS)	MASS	A	FIBROMA		
	_	MAMMARY GLAND		۵	DILATATION OF GLAND	-	
	_	HARDERIAN GLANDS		Η .	INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ +	
		BRAIN	IMPRESSION	+ + - -	DILATATION OF CEREBRAL VENTRICLE PIGMENTATION	+ + + +	

1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

A , SMALL AND/OR SINGULAR B , MEDIAL AND/OR SPORADIC C , LARGE AND/OR MULTIPLE

3) GRADE OF MASS:

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					STUDY NO. 83002
ANIMAL 1) 4) NUMBER) 4) E DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE			PROBABLE CAUSE OF DEATH OR MAJOR
		2		!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			PATHOLOGICAL FINDINGS
٧ 8010	733	LUNG			CALCIFICATION OF VASCULAR WALL	+	
		KIUNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	. +	
					PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
		TESTES	ENLARGEMENT (UNILATERAL)	+			
			NODULE (BILATERAL)	++++			
		SEMINAL VESICLE	ATROPHY	+ + +			
		SKIN	MASS	æ			
		SKIN (SUBCUTIS)	MASS	ပ			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ ' SLIGHT
++ ' MODERATE
+++ ' SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

: ! ! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !			STUDY NO 83002
ANIMAL 1)	1)	(7	ORGAN	GROSS PATHOLOGICAL	2333	HISTODATUS		
NUMBER	; - ! - !	0 1	; ; ; ; ; ; ; ; ; ;	FINDINGS	GRADE	FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0107	>-	733	LUNG			!	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PAIHOLOGICAL FINDINGS
			LIVER	YELLOWISH CHANGE	+	CALCIFICATION OF VASCULAR WALL	+	
			KIDNEYS		~	CHRONIC PROGRESSIVE GLOMERII ONEPHRODATHUY (511, 111)	+	
					,	PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
			TESTES	ATROPHY CUNTI ATERA! >	+			
				NODULE (BILATERAL)	+ +			
			PITUITARY GLAND	HEMORRHAGE ENLARGEMENT	+ +			
			SKIN (SUBCUTIS)	MASS	ပ			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

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3) GRADE OF MASS:

11-M2-0108 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ı				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4)	10	(7	ORGAN	GROSS PATHOLOGICAL	2) 3)			
NUMBER	7 A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	DAYS		FINDINGS	GRADE	ntsluralHULUGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	FAIHULUGICAL FINDINGS
0108	> -	733	Y 733 SPLEEN	ENLARGEMENT	+		·	
			LIVER	NODULE	+			
			KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	· + +	
					- / •	PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
			TESTES	ATŘOPHY (BILATERAL)	+			
			PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

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11-M2-0109 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1	1						STUDY NO. 83004
ANIMAL NUMBER	1) 4) FATE DAYS	4) ORGAN YS	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				! ! ! !	PATHOLOGICAL FINDINGS
0109	W 579	THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+ +	ADENOMA: PITUITARY GLAND
		LYMPH NODES (SUBMAXI.)	ENLARGEMENT	+ +	SQUAMOUS CELL CARCINOMA, METASTASIS		SWUAMOUS CELL CARCINOMA : SKIN (SUBCUTIS) LEYDIG CELL TUMOR: TESTES
		SPLEEN	ENLARGEMENT	+ + +	CONGESTION EXTRAMEDULLARY HEMATOPOIESTS	+ +	
		BONE MARROW			ACTIVATION OF HEMATOPOIESIS	+ - + - +	
		LUNG			CALCIFICATION OF VASCULAR WALL	+	. **
		LIVER			PROLIFERATION OF BILE DUCT WITH FIBROSIS	· +	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	
				·•.	INFIL/RATION OF LEUCOCYTES (UNILATERAL)	+	
		TESTES	ENLARGEMENT (UNILATERAL) NODULE (UNILATERAL)	+ +	LEYDIG CELL TUMOR (BILATERAL)		
		PITUITARY GLAND			ADENOMA		
		THYROID GLANDS		x	HYPERPLASIA OF C-CELLS (UNILATERAL)	+	

1) FATE : W , KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

3) GRADE OF MASS:

2) GRADE : NEGATIVE NOT PRESENTED	+ SLIGHT	++ \ MODERATE	+++ SEVERE
1) FATE : W . KILLED IN EXTREMIS			4) DAYS : AFTER START OF TREATMENT
ш 2			0 F
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FATE			DAYS
1)			7

1) FATE : W . KILLED IN EXTREMIS

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT INDIVIDUAL PATHOLOGICAL FINDINGS LEVEL AND SEX : 2)3) GRADE APPENDIX . ს GROSS PATHOLOGICAL FINDINGS

SKIN (SUBCUTIS) MASS

THYROID GLANDS

579

3

0109

ORGAN

4) DAYS

1) FATE

ANIMAL NUMBER ENLARGEMENT OF FOLLICLE (BILATERAL) +

SQUAMOUS CELL CARCINOMA. PRIMARY

PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS

2) GRADE

HISTOPATHOLOGICAL FINDINGS

STUDY NO. 83004

MALE

10 PPM

CONTINUED

11-M2-0109

APPENDIX 11-M2-0110

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 10 PPM MALE

			1 1 1			STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER) ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0110 W 721	неакт			FIBROSIS MIGRATION OF HEMOSIDERIN-LADEN CELLS	+ + +	ADENOCARCINOMA: JEJUNUM HEPATOCELLULAR ADENOMA : LIVER
	THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	LEYDIG CELL TUMOR: TESTES
	LYMPH NODES	ENLARGEMENT	+ + +	ANGIECTASIA	+ +	
	SPLEEN	ENLARGEMENT	+ +	EXTRAMEDULLARY HEMATOPOIESIS CONGESTION	+ + +	
	BONE MARROW			OSTEOGENESIS ACTIVATION OF HEMATOPOIESIS	+ + +	
	LARYNGOPHARYNX	-·		CYSTIC DILATATION OF GLAND	+	
	r un G			CALCIFICATION OF VASCULAR WALL	+	
	JEJUNUM	MASS	U	ADENOCARCINOMA		
	LIVER	MASS ENLARGEMENT DISCOLORATION	+ + + + 4 + +	HEPATOCELLULAR ADENOMA FATTY DEGENERATION OF HEPATIC CELLS CHOLANGIOFIBROSIS THROMBOARTERITIS	+ + +	
	PANCREAS			ATROPHY OF PANCREATIC ACINUS	+	
	KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	
			1 1 1 1 1			

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE 4) DAYS : AFTER START OF TREATMENT 1) FATE : W . KILLED IN EXTREMIS

CONTINUED
11-M2-0110
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL. IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX: 10 PPM MALE

	1 1 1 1			! ! ! ! !			STUDY NO. 83004
ANIMAL 1) 4) NUMBER	DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS		PROBABLE CAUSE OF DEATH OR MAJOR
0110 W	721	KIDNEYS	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;			! ! ! ! ! !	TATACHOGICAL FINDINGS
					PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
		TESTES	ENLARGEMENT (UNILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
			ATROPHY CHAIN ATERALN	+ + +			
			NODULE (UNILATERAL)	+ + +			
		SEMINAL VESICLE	ATROPHY	+++	АТКОРНУ	++	
		ADRENAL GLANDS			VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	+	
		BRAIN		ш	PIGMENTATION	+	

2) GRADE: NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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APPENDIX 11-M2-0111

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 10 PPM MALE

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1 1 1			! ! ! ! !			STUDY NO. 83004
ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	0 P A	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0111	>-	733	SPLEEN		 		! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	
			LUNG			CALCIFICATION OF VASCULAR WALL	+	
			LIVER	WHITISH PATCH	+			
·			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
			TESTES	NODULE (BILATERAL)	+ + +			
			PROSTATIC GLAND	ATROPHY	+ + +			
			SEMINAL VESICLE	ATROPHY	+ + +			
			SKIN (SUBCUTIS)	MASS	ပ			

2) GRADE : NEGATIVE NOT PRESENTED	+ > SLIGHT	' ++ ' MODERATE	+++ SEVERE
		•	
1) FATE : Y , KILLED ON SCHEDULE			4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON

11-M2-0112 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL. IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

	1			1		! ! ! ! ! !	STUDY NO. 83004
ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0112 W	537	HEART			FIBROSIS MIGRATION OF HEMOSIDERIN-LADEN CELLS	++	MALIGNANT FIBROUS HISTIO- CYTOMA: SKIN KUBCUTIS) LEYDIG CFII THMORE TESTES
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
		SPLEEN			EXTRAMEDULLARY HEMATOPOIESIS HEMOSIDEROSIS	+ +	
		BONE MARROW			ACTIVATION OF HEMATOPOIESIS	+	
		LUNG			HEMORRHAGE CALCIFICATION OF VASCULAR WALL	+ +	
		LIVER	DISCOLORATION	+ +	FATTY DEGENERATION OF HEPATIC CELLS SWELLING OF KUPFFER CELLS	+ + •	
		PANCREAS		T,4 &	HYPERPLASIA OF ISLET-CELLS ATROPHY OF PANCREATIC ACINUS MIGRATION OF HEMOSIDERIN-LADEN CELLS	+ + +	
		KIDNEYS) H	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	.] ; ; ; ;	TESTES	ATROPHY (UNILATERAL)	+ + +	LEYDIG CELL JUMOR (BILATERAL)		
1) FATE 4) DAYS	. W .	1) FATE: W / KILLED <u>in extremis</u> 4) DAYS: AFTER START OF TREATMENT	2) GRADE :	N H H H	PRESENTED 3) GRADE A	OF MASS SMALL AND MEDIAL AN	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC
				•	`	ARGE AND	/OR MULTIPLE

CONTINUED 11-M2-0112 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE РРМ 10 LEVEL AND SEX :

1 1 1 1	1 1 1 1 1	1						STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) FATE	4) DAYS		PATHOLOGIC FINDING	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0112	3	537	TESTES	NODULE (UNILATERAL)	! ! ! ! ! ! ! ! ! ! !			
			SEMINAL VESICLE		A	АТКОРНУ	+	
			THYROID GLANDS		I	HYPERPLASIA OF C-CELLS (BILATERAL)	+	
			ADRENAL GLANDS		>	VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	+	
			SKIN (SUBCUTIS)	MASS	υ	MALIGNANT FIBROUS HISTIOCYTOMA		
			HARDERIAN GLANDS		H	INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	

1) FATE : W , KILLED IN EXTREMIS

2) GRADE : NEGATIVE NOT PRESENTED + / SLIGHT ++ / MODERATE +++ / SEVERE

4) DAYS : AFTER START OF TREATMENT

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3) GRADE OF MASS:

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

10 PPM LEVEL AND SEX :

MALE

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1							STUDY NO. 83004
ر ا	ANIMAL 1) 4)	7 7	ORGAN	GROSS PATHOLOGICAL	(2)3)		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
NUMBER	์ - ก	V + V		FINDINGS	GRADE	FINDINGS	2) GRADE	. PROBABLE CAUSE Of DEATH OR MAIOR
	: : :	! ! !			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			PATHOLOGICAL FINDINGS
	> -	733	LUNG				! ! ! ! ! ! !	
			LIVER	NODULE	+	37	+	
			KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMFRHI ONFPHRODATHY (1711)	+ +	
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
			TESTES	NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE	АТКОРНУ	+			
			THYROID GLANDS	ENLARGEMENT (UNILATERAL)	+ + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

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11-M2-0114	
APPENDIX	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

			1			STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	O R G A N	GROSS PATHOLOGICAL FINDINGS	ICAL 2)3) NGS GRADE	-HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0114 Y 733 LUNG	LUNG			ALCIFICATION OF VASCULAR WALL	 	
	KIDNEYS	•	O	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (RILATEDAL)	+	
			п. н	PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
	TESTES	ATROPHY	+			
		NODULE (BILATERAL)	+ + +			
	SEMINAL VESICLE	АТВОРНУ	+			

1) FATE: Y XILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

11-M2-0115 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

10 PPM LEVEL AND SEX :

# # # # # # # # # # # # # # # # # # #	1	1 1			1		 	STUDY NO. 83004
ANIMAL FA NUMBER	1) FATE D	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0115	3	711	MULTIPLE ORGANS	YELLOWISH CHANGE.	+ .	ONO	 	PHEOCHROMOCYTOMA: ADRENAL
			THYMUS	•		HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	GANDS GANGLIONEUROMA: ADRENAL GLANDS
			SPLEEN	ENLARGEMENT	+ + +	CONGESTION HEMORRHAGE	+ + + + + +	LEYDIG CELL TUMOR: TESTES PAPILLARY ADENOMA : MAMMARY GLAND
			BONE MARROW			ACTIVATION OF HEMATOPOIESIS	+	шД
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	ADENOMA: KIDNEYS
			LUNG	ENLARGEMENT DISCOLORATION	+ +	CALCIFICATION OF VASCULAR WALL	+	
			STOMACH			EDEMA	+ +	
			LIVER	ENLARGEMENT	+ + +	PROLIFERATION OF BILE DUCT HYPERPLASTIC NODULE	+ + + +	
			PANCREAS			ATROPHY OF PANCREATIC ACINUS	+	
			KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL) ADENOMA (UNILATERAL)	+ + + + + + + + + + + + + + + + + + + +	
	1		TESTES	ATROPHY (BILATERAL)	+ + +	CELL TUMOR (BILATER		
1) F ₁	FATE : DAYS :	W '	KILLED IN EXTREMIS R START OF TREATMENT	2) GRADE :	. NEGATIVE + , SLIGH ++ , MODER +++ , SEVER	NOT PRESENTED 3) GRADE T A A A A A TE E E C C C C C C C C C C C C C C C C	OF MASS: SMALL AND/OR S MEDIAL AND/OR V	SS: AND/OR SINGULAR AND/OR SPORADIC AND/OR MULTIPLE

3) GRADE OF MASS:

CONTINUED
11-M2-0115
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

				-				STUDY NO. 83002
ANIMAL 1) 4)	1)	7	ORGAN	CANCO LOUTED SOUR			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
NUMBER	FATE	DAYS		FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		7	PATHOLOGICAL FINDINGS
0115	₃	711	TESTES				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
				NODULE (BILATERAL)	+			
			PROSTATIC GLAND		I	INFLAMMATION		
			SEMINAL VESICLE		AT	АТВОРНҮ	+ -	
			ADRENAL GLANDS		a.	WO HAS DOWN DOWN DOWN DOWN DOWN DOWN DOWN DOWN	 -	
				•		GAGGORANDO CHOMEA (UNILATERAL) GANGLIONEURONA (UNILATERAL) VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	+	
			MAMMARY GLAND		DI PA	DILATATION OF GLAND PAPILLARY ADENOMA	+	

4) DAYS : AFTER START OF TREATMENT 1) FATE : W . KILLED IN EXTREMIS

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE

10 PPM

LEVEL AND SEX :

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					STUDY NO. 83004
ANIMAL 1) 4) NUMBER	ORGAN		2)3) GRADE	HISTOPATHOLOGICAL FINDINGS		PROBABLE CAUSE OF DEATH OR MAJOR
0116 Y 734	P n n e			ADENOMATOSIS	 	
	KIDNEYS		, (THE STATE OF THE S	+	
			ے د <u>۔</u>	CHKUNIC PRUGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	
	TESTES	ATROPHY CHNTI ATERALS	+ + +			
		ENLARGEMENT CHNTI ATERAL	+ + +			
		NODULE (UNILATERAL)	+ + +			
	SEMINAL VESICLE ATROPHY	E ATROPHY	+ + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

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3) GRADE OF MASS:

11-M2-0117 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

1 1 1 1 1	1 1 1	1 1						STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) 47E	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
	1 1 1	1 1 1 1					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PATHOLOGICAL FINDINGS
0117	· ≻	734	LUNG		J	CALCIFICATION OF VASCULAR WALL	+	
			LIVER	WHITISH PATCH	+			
			KIDNEYS		Ü	CHRONIC PROGRESSIVE	+	
					ш.	GLUMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+	
			TESTES	ENLARGEMENT CHATLATERALY	+ + +			
				NODULE (BILATERAL)	+ + +			
			PROSTATIC GLAND	ATROPHY	+			
			SEMINAL VESICLE	ATROPHY	+			

1) FATE : Y × KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

11-M2-0118 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

1	!	1 1			1			STUDY NO. 83004
ANIMAL F NUMBER	1) FATE D	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0118	S ×	519	THORACIC CAVITY	HEMORRHAGE	+ + +			OSARCOMA: SPLEE
			HEART			FIBROSIS	+	LEYDIG CELL TUMOR: TESTES
			LYMPH NODES			BLOOD ABSORPTION	+ + +	
			SPLEEN	MASS	ပ	HEMANGIOSARCOMA		
			BONE MARROW			ACTIVATION OF HEMATOPOIESIS	+ +	
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
			LUNG	CONGESTION	+ +	CONGESTION EXTRAMEDULLARY HEMATOPOIESIS CALCIFICATION OF VASCULAR WALL HEMORRHAGE	+ + + +	
			COLON	NODULE	+			
•			LIVER	DISCOLORATION	+	:ANEMIA FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT SMALL GRANULOMA	+ + + +	
			PANCREAS			ATROPHY OF PANCREATIC ACINUS FIBROSIS MIGRATION OF HEMOSIDERIN-LADEN CELLS	+ + + +	
			KIDNEYS	BLACKISH CHANGE (BILATERAL)		CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	
1) F	FATE: DAYS:	13 A	KILLED IN EXTREMIS TER START OF TREATMENT	2) GRADE	NEGATIVE + SLIGH ++ MODER +++ SEVER	NOT PRESENTED 3) GRADE IT A . A . ATE B .	OF MASS: SMALL AND/OR MEDIAL AND/OR LARGE AND/OR	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

CONTINUED	N TOXICOLOGICAL STUDY ER RAT
11-M2-0118	AND CARCINOGENIC INHALATION TOXI. OF METHANOL IN FISCHER RAT
APPENDIX	CARCINOGENIC OF METHANOL
	AND
	CHRONIC AND

INDIVIDUAL PATHOLOGICAL FINDINGS

10 PPM LEVEL AND SEX :

MALE

	1 1 1 1 1	1						STUDY NO. 83004
ANIMAL 1) 4)	1	7	ORGAN	GROSS PATHOLOGICAL	2)3)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	
NUMBER	г А П	DAYS		FINDINGS	GRADE	SS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
	! ! !	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	*		!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			PATHOLOGICAL FINDINGS
0118	3	519	519 KIDNEYS					
					4 i	INFILTRATION OF LEUCOCYTES + (BILATERAL)		
			TESTES	ATROPHY (UNILATERAL)	+	LEYDIG CELL TUMOR (BILATERAL)		
			ADRENAL GLANDS		VA	VACUOLAR DEGENERATION OF CORTICAL + CELLS (BILATERAL)		
			HARDERIAN GLANDS		N i	INFILTRATION OF LEUCOCYTES +		

1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

3) GRADE OF MASS:
A ' SMALL AND/OR SINGULAR
B ' MEDIAL AND/OR SPORADIC
C ' LARGE AND/OR MULTIPLE

)(A)

3) GRADE OF MASS:

11-M2-0119 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX : .

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					1			STUDY NO. 83004	
ANIMAL F NUMBER	1) FATE D	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS	
0119	9	269	MULTIPLE ORGANS		E	MONONUCLEAR CFIT FIREMTA			
			THYMUS		T.	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	. +	MONONUCLEAR CELL LEUKEMIA : MULTIPLE ORGANS C-CELL ADENOMA: THYROID	
	*		LYMPH NODES (SUBMAXI.)		Σ	MIGRATION OF FOAMY CELLS	+	GLANDS ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES	-
			LYMPH NODES (PULM.HILUS)		æ	BLOOD ABSORPTION	+		
			SPLEEN		ÖΞ	CONGESTION HEMOSIDEROSIS	+ + + +		
			BONE MARROW		A	ACTIVATION OF HEMATOPOIESIS	+		
		-	LUNG		22	CONGESTION	+		
		-	STOMACH		UL	ULCER EDEMA	++		
			LIVER	ROUGHNESS OF SURFACE	+ A G G R S D D D D D D D D D D D D D D D D D D	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS FOCAL ATROPHY OF HEPATIC CELLS			
			PANCREAS		AT	ATROPHY OF PANCREATIC ACINUS	++		
		*	KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	9 +	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+ + +		

1) FATE : W , KILLED IN EXTREMIS

2) GRADE : NEGATIVE NOT PRESENTED

4) DAYS : AFTER START OF TREATMENT

**

3) GRADE OF MASS:
A × SMALL AND/OR SINGULAR
B × MEDIAL AND/OR SPORADIC
C × LARGE AND/OR MULTIPLE

				STUDY NO. 83004	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS									
				!	2) GRADE		+ + + +	+ + +			+	+		
11-M2-0119 CONTINUED	CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	INDIVIDUAL PATHOLOGICAL FINDINGS	: 10 PPM MALE) HISTOPATHOLOGICAL FINDINGS		PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES	FIBROSIS (BILATERAL) CYST (UNILATERAL)	LEYDIG CELL TUMOR (BILATERAL)		INFLAMMATION	АТКОРНУ	ADENOMA	C-CELL ADENOMA (UNILATERAL)
APPENDIX	I NOGENIC METHANO	IDUAL PA	AND SEX	1	2)3) GRADE	 			+ + +	+ + +		+	+ +	+
	CHRONIC AND CARC	UNDIV	LEVEL		GROSS PATHOLOGICAL FINDINGS				ATROPHY CUNILATERAL)	ENLARGEMENT (UNILATERAL)		АТВОРНУ	ENLARGEMENT HEMORRHAGE	NODULE (UNILATERAL)
					ORGAN	KIDNEYS			TESTES		PROSTATIC GLAND	SEMINAL VESICLE	PITUITARY GLAND	THYROID GLANDS
				!!!!!!!!!!!!!	4) DAYS	269	•							
				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	L 1) FATE	3								

ANIMAL NUMBER

0119

1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

	1			1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0120 Y 7	734	LUNG			CALCIFICATION OF VASCULAR WALL OSSEOUS TISSUE	 	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
		TESTES	ATROPHY	+			
	•		CUNICATERAL) ENLARGEMENT	+			
			NODULE (BILATERAL)	+ + +			
		PROSTATIC GLAND	ATROPHY	+ + +			
		SEMINAL VESICLE	ATROPHY	+ + +			

4) DAYS : AFTER

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL. IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

10 PPM LEVEL AND SEX :

MALE

	1 1	1			. !			STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) ATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0121	>-	734	LUNG) 	CALCIFICATION OF VASCULAR WALL	1	
			KIDNEYS		0 11	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + ++	
			TESTES	ENLARGEMENT (BILATERAL) NODULE (BILATERAL)	+ + + + + +			
			PROSTATIC GLAND	ATROPHY	+ + +			
			SEMINAL VESICLE ATROPHY	АТRОРНҮ	+ + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE

3) GRADE OF MASS:
A × SMALL AND/OR SINGULAR
B × MEDIAL AND/OR SPORADIC
C × LARGE AND/OR MULTIPLE

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3) GRADE OF MASS:

11-M2-0122 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE РРМ 10 LEVEL AND SEX :

			1	:		STUDY NO. 83005
ANIMAL 1) 4) NUMBER FATE DAYS	ORGAN	0 0	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS		PROBABLE CAUSE OF DEATH OR MAJOR
0122 Y 734	SPLEEN	ENLARGEMENT	+			rainoLugical Findings
	LUNG	NODULE : .		CALCIFICATION OF VASCULAR WALL	+	
	KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (RTIATERAL)	+	
				PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
	TESTES	ENLARGEMENT	+ + +			
		NODULE (BILATERAL)	+ + +			
	SEMINAL VESICLE	ATROPHY	+ + +			
	SKIN (SUBCUTIS)	MASS	, U			

1) FATE: Y / KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE

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11-M2-0123 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

ANTIMAL 10		1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				! ! ! ! !	STUDY NO. 83004
HEART	IMAL MBER	1	! ! !	PATHOLOG FINDI	2)3) GRADE	ဗ	2) GRADE	
THYMUS PREIGCLUNG CELLS SPLEEN SPLEEN SPLEEN CONGESTION HENOSIDERIN-LADEN CONGESTION HENOSIDERIN-LADEN CALCIFICATION OF HEMOSIDERIN-LADEN LUNG JEJUNUM MASS A LETOWOGARGENEATION OF HEPATIC CELLS SMALL GRANULOMA CALCIFICATION OF HEPATIC CELLS HENOSIDERING HENOSIDERING CALCIFICATION OF HEPATIC CELLS HENOSIDERING HENOSIDER		715	НЕАКТ			0.5	! ! ! ! + ! + +	C-CELL ADENOMA: THYROID GLANDS LEIOMYOSÁRCOMA: JEJINIM
LUNG LUNG LIVER WASS A LEIOMYOSARCOMA LIVER VELLOWISH CHANGE ++ FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF HEPATIC CELLS WITH FIBROSIS ATROPHY OF PANCREATIC ACINUS (BILATERAL) TESTES ATROPHY ++ HYPERPLASIA OF LEYDIG CELLS (BILATERAL) INFILTRATION (BILATERAL) FIGHENTATION OF LEUCOCYTES (CHILATERAL) THESTES THESTES THESTES ATROPHY ++ HYPERPLASIA OF LEYDIG CELLS THESTES THESTES THESTES THESTES THESTER THE START OF TREATMENT THE MYPERPLASIA OF LEYDIG CELLS THE START OF TREATMENT THE START OF TREATMENT THE MYPERPLASIA OF LEYDIG CELLS THE START OF TREATMENT THE MYPERPLASIA OF LEYDIG CELLS THE START OF TREATMENT THE MYPERPLASIA OF LEYDIG CELLS THE START OF TREATMENT THE MYPERPLASIA OF LEYDIG CELLS THE START OF TREATMENT THE MYPERPLASIA THE MYPERPLASIA OF LEYDIG CELLS THE START OF TREATMENT THE MYPERPLASIA OF LEYDIG CELLS THE START OF TREATMENT THE MYPERPLASIA THE M			THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS MIGRATION OF HEMOSIDERIN-LADEN CELLS	+ +	ADENOMA: PITUITARY GLAND
LIVER YELLOWISH CHANGE ++ FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA FOR HEPATIC CELLS SMALL GRANULOMA FOR HEPATIC CELLS FOR A LEIOWYOSARCOMA FOR LATROPHY OF HEPATIC CELLS WITH FIBROSIS MITH FIBROSIS ATROPHY OF PANCREATIC ACINUS GLOMENUCNEPHYOPHY (BILATERAL) FOR SURFACE + CHRONIC PROGRESSIVE GLOMENUCNEPHROPATHY (BILATERAL) FOR SURFACE + CHRONIC PROGRESSIVE GLOMENUCNEPHROPATHY (BILATERAL) FOR SURFACE + CHRONIC PROGRESSIVE GLOMENUCNEPHROPATHY (BILATERAL) FOR SURFACE + CHRONIC PROGRESSIVE GLOMENUCNTES (BILATERAL) FOR SURFACE + HYPERPLASIA OF LEYDIG CELLS (BILATERAL) FOR SURFA			SPLEEN			CONGESTION HEMOSIDEROSIS	+ +	
LIVER YELLOWISH CHANGE ++ FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS ATROPHY OF PANCREATIC ACINUS (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL) INFILTRATION OF LEUCOC			LUNG	- -	•	CALCIFICATION OF VASCULAR WALL	+	
LIVER YELLOWISH CHANGE +++ FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS ATROPHY OF PANCREATIC ACINUS (BILATERAL) FORMEROPHY OF PANCREATIC ACINUS (CALMONIC PROGRESSIVE (CALMONIC PROGRESS			JEJUNUM	MASS		LEIOMYOSARCOMA		
KIDNEYS ROUGHNESS OF SURFACE + CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) INFILTRATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL) INFILTRATION OF LEUCOCYTE			LIVER	YELLOWISH CHANGE	•	ATION OF HEPATIC MA OF HEPATIC CELLS OF BILE DUCT		
KIDNEYS ROUGHNESS OF SURFACE + CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL) TESTES ATROPHY W KILLED IN EXTREMIS W KILLED IN EXTREMIS A A COMMENDERALE AFTER START OF TREATMENT ++ NODERATE CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL) A A COMMENDERALE A COMMENDERALE CHRONIC PROGRESSIVE CHRONIC PROGRESSIVE CHRONIC PROGRESSIVE A COMMENDERALE CHRONIC PROGRESSIVE CHRON			PANCREAS		1	OF PANCREATIC	++	
TESTES ATROPHY ++ HYPERPLASIA OF LEYDIG CELLS : W / KILLED IN EXTREMIS 2) GRADE : NEGATIVE NOT PRESENTED 3) GRADE + A SLIGHT - A A A A A A A A A A A A A A A A A A			KIDNEYS			HRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) IGMENTATION (BILATERAL) NFILTRATION OF LEUCOCYTES (BILATERAL)	+ + ++	
: W . KILLED IN EXTREMIS 2) GRADE : NEGATIVE NOT PRESENTED 3) GRADE : A . LIGHT		! ! ! !	TESTES		+ +	OF LEYDIG	+	
	1) FATE 4) DAYS		KILLED IN EXT	2) GRADE :	NEGATIVE + SLIG ++ MODE ++ SEVE	PRESENTED 3) GRADE B C C C C C C C C C C C C C C C C C C	OF MASS SMALL AND 1EDIAL AN	: 10R SINGULAR DOOR SPORADIC 10R MULTIPLE

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11-M2-0123	
APPENDIX	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

PATHOLOGICAL 2)3) HISTOPATHOLOGICAL 2)3 FINDINGS GRADE OF DEATH OR MAJOR	PATHOLOGICAL FINDINGS	TERAL) (BILATERAL)	INFLAMMATION +	EMENT +++ ADENOMA HAGE ++	C-CELL ADENOMA (UNILATERAL)	VACUOLAR DEGENERATION OF CORTICAL + CELLS (UNILATERAL)	DILATATION OF GLAND +	
GROSS PATHOLOGICAL SELVEL		(BILATERAL)		ENLARGEMENT +++ HEMORRHAGE ++				NOT 33 BOME
ORGAN		TESTES	PROSTATIC GLAND	PITUITARY GLAND	THYROID GLANDS	ADRENAL GLANDS	MAMMARY GLAND	NTVOR
4) DAYS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	715						
ANIMAL 1)	1	3						
ANIMAL		0123						

1) FATE : W , KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++, MODERATE +++ , SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL: IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 10 PPM MALE

						STUDY NO. 83004
ANIMAL 15	4) ORGAN	GROSS PATHOLOGICAL	2)3)	HISTOPATHOLOGICAL		
	n	FINDINGS	GRADE	SPIGNIA	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
			1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PAIHULUGICAL FINDINGS
0124 Y 734	4 LUNG			CALCIFICATION OF MASCHIAR WALL		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	LIVER	NODULE	+		+	
	KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+ +	CHRONIC PROGRESSIVE GLOMFRII ONFPHRODATHY (PII ATTER)	+ + +	
				PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
	TESTES	ATROPHY	+			
		CUNILATERAL)	+ + +			
		NODULE (BILATERAL)	+ + +			
	SEMINAL VESICLE	ICLE ATROPHY	+ + +			
	SKIN	NODULE	+			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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APPENDIX 11-M2-0125

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 10 PPM MALE

	1 1 1			! ! ! ! !			STUDY NO. 83004
ANIMAL 1) NUMBER	1) 4) TE DAYS	S	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOG FI	2) GRADE	SE JOR DINGS
0125	779 M	HEART			FIBROSIS	+	ENCHYMOMA:
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	(SUBCUTIS) PHEOCHROMOCYTONA: ADRENAL GLANDS
		SPLEEN			EXTRAMEDULLARY HEMATOPOIESIS HEMOSIDEROSIS	+++	ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES
		BONE MARROW			OSTEOGENESIS	+	
		LUNG			OSSEOUS TISSUE CALCIFICATION OF VASCULAR WALL	+ +	
		RECTUM	CONSTIPATION	++			
		LIVER			FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS	+ +	
		PANCREAS		· .	ATROPHY OF PANCREATIC ACINUS HYPERPLASIA OF ISLET-CELLS	+ +	
		KIDNEYS	DISCOLORATION (BILATERAL) HYDRONEPHROSIS (BILATERAL)	+ +	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL) PYELITIS (BILATERAL)	+ + + +	

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE 4) DAYS : AFTER START OF TREATMENT 1) FATE : W . KILLED IN EXTREMIS

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CONTINUED
11-M2-0125
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

			1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0125 W 644	KIDNEYS		 			
				DILATATION OF URINARY TUBULES (BILATERAL)	+	
	URINARY BLADDER	EXPANSION THICKENING	+ +	INFLAMMATION	+ + +	
	TESTES			LEYDIG CELL TUMOR (UNILATERAL)		
	PROSTATIC GLAND			INFLAMMATIGN	+ + +	
	SEMINAL VESICLE			INFLAMMATION	+ + +	
	PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + + +	ADENOMA		
	ADRENAL GLANDS			PHEOCHROMOCYTOMA (UNILATERAL) VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	+	
	MUSCLE (Q. FEMORIS)			ATROPHY HYALINE DEGENERATION	+ + + +	
	SKIN (SUBCUTIS)	MASS	A	MESENCHYMOMA		
	MAMMARY GLAND			DILATATION OF GLAND	+	
	SCIATIC NERVE			DEMYELINIZATION	+ +	

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 1) FATE : W , KILLED IN EXTREMIS

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

5.

11-M2-0126 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLÒGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	! ! ! !			 			STUDY NO. 83004
ANIMAL 1) NUMBER FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	LE CAUSE OR MAJO
0126 W	636	HEART			FIBROSIS		MALIGNANT FIBROUS HISTIO-
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	CYTOMA: SKIN (SUBCUTIS) LEYDIG CELL TUMOR: TESTES
		LYMPH NODES	ENLARGEMENT	+			
		CARSTANT (MESSENT)			BLOOD ABSORPTION	+	
		SPLEEN			EXTRAMEDULLARY HEMATOPOIESIS HEMOSIDEROSIS	+ + +	
		BONE MARROW			ACTIVATION OF HEMATOPOIESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LUNG			MALIGNANT FIBROUS HISTIOCYTOMA. METASTASIS		
		STOMACH	ENLARGEMENT	+			
		SUBMAXILLARY GLANDS			REGENERATIVE CHANGE (UNILATERAL)	+	
		SUBLINGUAL GLANDS			REGENERATIVE CHANGE (UNILATERAL)	+	
		PAROTID GLANDS		- -	MALIGNANT FIBROUS HISTIOCYTOMA (BILATERAL), NETASTASIS		
		LIVER	YELLOWISH CHANGE	+	MALIGNANT FIBROUS HISTIOCYTOMA. METASTASIS		

	2) GRADE : NEGATIVE NOT PRESENTED	+ SLIGHT	++ / MODERATE	+++ SEVERE
!				
1 1 1 1 1 1 1	1) FATE : W , KILLED IN EXTREMIS			4) DAYS : AFTER START OF TREATMENT
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1 1 1 1 1	w . K			AFTER
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1	FATE			DAYS
1	1)			7
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11-M2-0126	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 10 PPM MALE

	1 1 1			: : : :			STUDY NO. 83004
ANIMAL 1) NUMBER	4) DAYS	DRGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS		
0126 W	636	LIVER	1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		! ! ! !	PATHOLOGICAL FINDINGS
					FOCAL NECROSIS FOCAL ATROPHY OF HEPATIC CELLS FATTY DEGENERATION OF HEPATIC CELLS MIGRATION OF HEMOSIDERIN-LADEN CELLS	+ + + + + + + + S	
		PANCREAS			ATROPHY OF PANCREATIC ACINUS INFILTRATION OF LEUCOCYTES	+ +	
		TESTES	ATROPHY (UNILATERAL)	+	LEYDIG CELL TUMOR (BILATERAL)		
			NODULE (BILATERAL)	+ + +			
		SEMINAL VESICLE	ATROPHY	+	АТКОРНУ	4	
		PITUITARY GLAND		ح	MIGRATION OF HEMOSIDERIN-LADEN CELLS	· +	
		THYROID GLANDS		ν.	ENLARGEMENT OF FOLLICLE (BILATERAL)	+	
		SKIN (SUBCUTIS)	MASS	æ	MALIGNANT FIBROUS HISTIOCYTOMA, PRIMARY		
		HARDERIAN GLANDS		Ξ:	HYPERSECRETION (BILATERAL)	+	
		BRAIN		۵	PIGMENTATION	. 4	

1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE

NTED 3) GRADE OF MASS:
A \ SMALL AND/OR SINGULAR
B \ MEDIAL AND/OR SPORADIC
C \ LARGE AND/OR MULIIPLE

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11-M2-0127 APPENDIX CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL, IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

	i 1 1			1 1 1 1		STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	E DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	
	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		
0127 Y	Y 734	LUNG	NODULE	+	CALCIFICATION OF VASCULAR WALL PAPILLARY ADENOMA	+
		KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	++
					PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +
		TESTES	NODULE (BILATERAL)	+ + +		
		PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + + + +		

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED

+ / SLIGHT ++ / MODERATE +++ / SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND 'SEX : 10 PPM MALE

1	!	1 1 1 1 1			! ! ! ! !			STUDY NO. 83004
ANIMAL NUMBER	1) FATE	4) DAYS	0 R G A N	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0128	>-	734	SPLEEN	ROUGHNESS OF SURFACE	+		! ! ! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			LUNG			CALCIFICATION OF VASCULAR WALL PAPILLARY ADENOMA	+	
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
			TESTES	ATROPHY	+			
				(UNICAIERAL) ENLARGEMENT (UNIIATEDAL)	+ + +			
				NODULE (BILATERAL)	++++			
			PROSTATIC GLAND	ATROPHY	+ + +			
			SEMINAL VESICLE	ATROPHY	+++			
			SKIN (SUBCUTIS)	MASS	В			
			EYE BALLS	GRAYISH CHANGE (UNILATERAL)	+			

3) GRADE OF MASS:	A , SMALL AND/OR SINGULAR	B . MEDIA! AND/OR SPORADIC	C / LARGE AND/OR MULTIPLE
2) GRADE : NEGATIVE NOT PRESENTED	+ SLIGHT	++ / MODERATE	+++ SEVERE
1) FATE : Y , KILLED ON SCHEDULE			4) DAYS : AFTER START OF TREATMENT

3) GRADE OF MASS:
A , SMALL AND/OR SINGULAR
B , MEDIAL AND/OR SPORADIC
C , LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX : STUDY NO. 83004

ANIMAL 1) 4) FATE DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR DATHOLOGICAL FINDINGS	
NUMBER	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1		
0129 Y 734 LUNG	LUNG			CALCIFICATION OF VASCULAR WALL	+		
	KIDNEYS		Ü	CHRONIC PROGRESSIVE	+		
				GLUMEKULUNEFAKUFAIA! (BILAILA) PIGMENTATION (BILATERAL)	+		
				INFILTRATION OF LEUCOCYTES	+		
				(BILATERAL)			
	TESTES	NODULE (BILATERAL)	++				

4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

1 1 1		! ! ! !				 			STUDY NO. 83004
ANIMAL 1) FATE NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PA	THOLOGICAL FINDINGS	2)3) GRADE	HIS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0130	>-	735	רחאפ	NODULE		 	CALCIFICATION OF VASCULAR WALL PAPILLARY ADENOMA	 	
			KIDNEYS				CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
			TESTES	NODULE (BILATERAL)	I.LATERAL)	+ + +			
			SEMINAL VESICLE	ATROPHY		+ + +			
			EYE BALLS	ATROPHY (1	ATROPHY (UNILATERAL)	+			

1) FATE: Y KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL, IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

10 PPM MALE LEVEL AND SEX :

		1 1 1 1						NO STITE
					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			31001 NO: 83004
ANIMAL 1) 4) FATE DAYS NUMBER	. 1) ATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
	i ! !	: ! ! !			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			РА
0131	>-	735	LUNG			œ	 	
			KIDNEYS		J	CHRONIC PROGRESSIVE	+ + +	
					L 7	GLUMERULUNEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (RII ATEPAL)	+ +	
			TESTES	SOFTENING (BILATERAL)	+ + +	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
			PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + + + +			
			SKIN (SUBCUTIS)	NODULE	+ +			
			BRAIN	IMPRESSION	+ + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

3) GRADE OF MASS:

APPENDIX 11-M2-0132

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL: IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 10 PPM MALE

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		i		STUDY NO. 83004		STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) ATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	(2)	PROBABLE CAUSE
1	1	1			! ! ! ! ! !		GKADE	OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0132	>	00	1				!	
1			HEAKI		u_	FIBROSIS	+++++++++++++++++++++++++++++++++++++++	
			SPLEEN		.1.	HEMOSTO	- -	ADENOMA: PITUITARY GLAND
			PITHITABY CLAND	1	•	0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	+	
			מבעיים פרעיים	ENLAKGEMEN HEMORRHAGE	+++	ADENOMA		
		_	BRAIN	IMPRESSION	++			

1) FATE : X , FOUND DEAD

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
++ SEVERE

4) DAYS : AFTER START OF TREATMENT

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

Mdd 10 LEVEL AND SEX :

MALE

	 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						STUDY NO. 83004
ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0133	3	613	MULTIPLE ORGANS	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		!	PAIHOLOGICAL FINDINGS
						MONONUCLEAR CELL LEUKEMIA		MONONUCLEAR CFLL LEUKEMIA
			HEART			FIBROSIS	+	: MULTIPLE ORGANS
			THYMUS	ENLARGEMENT	+		-	- 1
			LYMPH NODES	ENLARGEMENT	+			: PANCREAS
			SPLEEN	ENLARGEMENT	+ + +			
			LUNG	NODULE	+ +	NECROSIS CALCIFICATION OF VASCIII AR WALL	+ + + -	
			STOMACH	THICKENING HEMORRHAGE	+ + + +	ULCER	+ +	
						HYPERKERATOSIS OF FORESTOMACH	+ + +	
			LIVER	ENLARGEMENT	÷ + +	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS	+ + + +	
		-	PANCREAS	NODULE	+ +	ISLET-CELL ADENOMA		
			KIDNEYS		_	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	, + +	
			TESTES N	NODULE (BILATERAL)	+ +	LEYDIG CELL TUMOR (BILATERAL)	.	
		•	ADRENAL GLANDS			VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	**	

1) FATE : W . KILLED IN EXTREMIS

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

3) GRADE OF MASS:

4) DAYS : AFTER START OF TREATMENT

3) GRADE OF MASS:
A × SMALL AND/OR SINGULAR
B × MEDIAL AND/OR SPORADIC
C × LARGE AND/OR MULTIPLE

				STUDY NO. 83004	PROBABLE CAUSE OF DEATH OF MAIOR	d	
					 2) RADE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+ +
APPENDIX 11-M2-0133 CONTINUED	CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	INDIVIDUAL PATHOLOGICAL FINDINGS	LEVEL AND SEX: 10 PPM MALE		GROSS PATHOLOGICAL 2)3) HISTOPATHOLOGICAL FINDINGS GRADE FINDINGS		HEMORRHAGE LEUKEMIC EMBOLISM
					ORGAN		NIN
				!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	DAYS	X X X) -
					ANIMAL 1) 4) NUMBER FATE DAYS	0133 W	

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : W . KILLED IN EXTREMIS

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN, FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 10 PPM MALE

! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
	:						
FATE DAYS	4) DAYS	ORGAN	GROSS PATHOLOGICAL		HISTOPATHOLOGICAL	(2)	
			, D. T. C. T	GRADE	FINDINGS	GRADE	OF DEATH OR MAJOR
! ! ! !	1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			ā.
0134 Y	735	981			1 []	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
		ָבָּבְּבְּבָּבְּבְּבִּבְּבִּבְּבִּבְּבִּבְּבִּבְּבִּבְּבִּבְּבִבְּבִּבְּבְּבִבְּבִּבְּבִבְּבִבְּבְּבִבְּבִבְּב			CALCIFICATION OF VASCULAR WALL	+	
		KIDNEVS					
					CHRONIC PROGRESSIVE	++	
				•	GLUMERULONEPHROPATHY (BILATERAL)		
					PIGMENIALION (BILATERAL)	+	
				•	(BILATERAL)	+	
		TESTES	NODULE (BILATERAL)	+ + +			
		SKIN	MASS	Q			
				<			

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRE

+ , SITGHT

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

11-M2-0135
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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX :

MALE 10 PPM

STUDY NO. 83004

ANIMAL 1) 4) NUMBER	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0135 W 666	HEART		<u> </u>	FIBROSIS	 	RHABDOMYOSARCOMA
	THYMUS		I	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	: SKN (SUBCUTIS) LEYDIG CELL TUMOR: TESTES
	LYMPH NODES		മ	BLOOD ABSORPTION	+	
	SPLEEN		шх	EXTRAMEDULLARY HEMATOPOIESIS HEMOSIDEROSIS	+ +	
	BONE MARROW		4 O	ACTIVATION OF HEMATOPOIESIS OSTEOGENESIS	+ +	
	LARYNGOPHARYNX		υ	CYSTIC DILATATION OF GLAND	+	
	LIVER		щď	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT	+ + v	
	PANCREAS		¥Σ	ATROPHY OF PANCREATIC ACINUS MIGRATION OF HEMOSIDERIN-LADEN CELLS	+ + +	
	KIDNEYS		20 G H	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ + + ++	
	TESTES	ATROPHY (BILATERAL)	++++	LEYDIG CELL TUMOR (BILATERAL)		
1) FATE: W ,	KILLED IN EXTREMI	2) GRADE	NEGATIVE NOT	PRESENTED 3) GRADE	OF MASS	: : : : : : : :
4) DAYS : AFTER	ER START OF TREATMENT		++ / MODERATE +++ / SEVERE	ш U	HEDIAL A	MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

3) GRADE OF MASS:	A . SMALL AND/OR SINGULAR	B . MEDIAL AND/OR SPORADIC	C . LARGE AND/OR MULTIPLE
2) GRADE : NEGATIVE NOT PRESENTED	+ > SLIGHT	++ / MODERATE	+++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE: W , KILLED IN EXTREMIS

APPENDIX 11-M2-0135 CONTINUED CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

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INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 10 PPM MALE

	PROBABLE CALISE	OF DEATH OR MAJOR PATHOLOGICAL FINDINGS					
STUDY	1089	OF DE/					
; ; ; ;	5)	GRADE		+ +		+	+
	3) HISTOPATHOLOGICAL E FINDINGS			VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	RHABDOMYOSARCOMA	HYPERSECRETION (BILATERAL)	PIGMENTATION
1	2)3)	GRADE		-	υ	-	u .
	GROSS PATHOLOGICAL FINDINGS		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		MASS		
	ORGAN	1		ADRENAL GLANDS	SKIN (SUBCUTIS)	HARDERIAN GLANDS	BRAIN
1	ANIMAL 12 42	UATS	 	999			
1		A	 	3			
!	ANIMAL	NUMBER		0135			

3) GRADE OF MASS:

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

> ANIMAL NUMBER 0136

					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO RECOV
L R F I	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	OLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
					!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			PATHOLOGICAL FINDINGS
	×	438	HEART		L.	FIBROSIS		
			SPLEEN		Ξ	HEMOSIDEROSIS	.	ADENOMA: PITUITARY GLAND
			LUNG				+ +	
					υυ	CONGESTIVE EDEMA CALCIFICATION OF VASCULAR WALL	+ + +	
		_	LIVER		I		-	
					L A O	FATTY DEGENERATION OF HEPATIC CELLS ++ PROLIFERATION OF BILE DUCT ++ CONGESTION	+ + +	
		-	PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + + + + +	ADENOMA	<u>+</u>	
			ADRENAL GLANDS		#	HEMORRHAGE (UNILATERAL)	+ + +	

1) FATE : X , FOUND DEAD

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE

3).

3) GRADE OF MASS:

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

10 PPM LEVEL AND SEX :

MALE

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1		1 1 1 1 1 1 1 1			
ANIMAL 1) 4) FATE DAYS NUMBER	4) ORGAN YS	Z,	GROSS PATHOLOGICAL · FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0137 Y 735	KIDNEYS				VASCULAR WALL VE ATHY (BILATERAL) ATERAL) EUCOCYTES	+ + ++	
	TESTES		NODULE (BILATERAL)	ر + +	CYSI (UNILATERAL)	+	
	SEMINAL	SEMINAL VESICLE ATROPHY	ATROPHY	+ + +			

2) GRADE : NEGATIVE NOT PRESENTED 4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

+ / SLIGHT ++ / MODERATE +++ / SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER FATE DAYS	1) ATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	g	! ! ! ! ! ! !	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0138	>-	735	רחאפ		! ! ! ! ! ! !	CALCIFICATION OF VASCULAR WALL	 	
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+ +	
				÷		PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
			TESTES	ENLARGEMENT (UNILATERAL)	+ + +			
				ATROPHY (UNIT ATERAL)	+			
				NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE	ATROPHY	+ + +			

2) GRADE : NEGATIVE NOT PRESENTED + > SLIGHT ++ > MODERATE +++ > SEVERE 4) DAYS : AFTER START OF TREATMENT 1) FATE: Y KILLED ON SCHEDULE

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2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : W . KILLED IN EXTREMIS

3) GRADE OF MASS:

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 10 PPM MALE

							! ! ! !	STUDY NO. 83004
ANIMAL F/	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0139	3	396	MULTIPLE ORGANS			MONONUCLEAR CELL LEUKEMIA		MONONUCLEAR CELL, LEUKEMIA
	•		неакт			FIBROSIS HEMORRHAGE MIGRATION OF HEMOSIDERIN-LADEN CELLS	+ + + +	
			THYMUS			ATROPHY HEMORRHAGE	+ + + + + +	
			LYMPH NODES	ENLARGEMENT	+ +			
			(PULM.HILUS) SPLEEN	ENLARGEMENT ROUGHNESS OF SURFACE	+ + + +			
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
			LUNG	REDDISH CHANGE	+	CALCIFICATION OF VASCULAR WALL	+	
			RECTUM	HEMORRHAGE	+	Pu.		
			LIVER	ENLARGEMENT ROUGHNESS OF SURFACE	+ +	FATTY DEGENERATION OF HEPATIC CELLS +++ PROLIFERATION OF BILE DUCT ++	+ + + + +	
			KIDNEYS	WHITISH PATCH (BILATERAL)	+	PIGMENTATION (BILATERAL) VACUOLAR DEGENERATION (BILATERAL)	+ + + +	•
			TESTES	SOFTENING (BILATERAL)	÷	HYPERPLASIA OF LEYDIG CELLS (BILATERAL)	+	
			SEMINAL VESICLE	ATROPHY	+ +			

				S	USE AJOR VDINGS				
				STUDY NO. 83004	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS				
				; ; ; ; ;	2) GRADE		+ + +	+	++++
11-M2-0139 CONTINUED	CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	INDIVIDUAL PATHOLOGICAL FINDINGS	: 10 PPM MALE		HISTOPATHOLOGICAL FINDINGS	ADENOMA	VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	HEMORRHAGE (UNILATERAL)	MOLICE HERBOLING
APPENDIX	NOGENIC METHANOL	DUAL PAT	LEVEL AND SEX	! ! ! ! !	2)3) GRADE	+			+
A	CHRONIC AND CARCI	INDIVI	· LEVEL		GROSS PATHOLOGICAL FINDINGS	NODULE			HEMORRHAGE
					ORGAN	PITUITARY GLAND	ADRENAL GLANDS	EYE BALLS	BRAIN
				1	4) DAYS	396			
					1) FATE	3			
					ANIMAL NUMBER	0139			

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE 1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

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. CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

10 PPM LEVEL AND SEX :

MALE

	1						STUDY NO. 83004
ANIMAL 1)	(7	ORGAN	GROSS PATHOLOGICAL	2)3)		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
NUMBER	DAYS		FINDINGS	GRADE	FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0140 Y 7	735	2					
	\ \ \	7 2 3			PAPILLARY ADENOMA CALCIFICATION OF VASCULAR WALL	+	
		KIDNEYS		S	CHRONIC PROGRESSIVE	+ +	
					PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
		TESTES	ATROPHY CHAIL ATERALS	+			
			CONTLATERAL) ENLARGEMENT (UNITATERAL)	++++			
			NODULE (BILATERAL)	+ + +			
		SEMINAL VESICLE	ATROPHY	+ +			
		PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ +			
		SKIN (SUBCUTIS)	MASS	Ω.			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:
A \ SMALL AND/OR SINGULAR
B \ MEDIAL AND/OR SPORADIC
C \ LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

10 PPM LEVEL AND SEX :

MALE

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1	1						STUDY NO. 83004
ANIMAL 1) FATE NUMBER	1) FATE	4) DAYS	ORGAN	19 1 N I	2) AD	OPATHOLOGICAL FINDINGS	RA RA	<u>.</u>
0141	>-	735	LUNG			CALCIFICATION OF VASCULAR WALL	 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			KIDNEYS			CHRONIC PROGRESSIVE	+ +	
						SCUMENCIONETMONATEN (SILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (RITATERAL)	+ + +	
			7 F S F F S F F S F F S F F S F F S F F S F F S F F S F F S F F S F F S F F F S F F F S F F F S F F F S F F F S F F F S F F F F S F F F S F F F S F F F F S F F F S F F F F S F F F F S F F F S F F F F S F F F F S F F F F F F F S F F F F F S F	FNI ARGEMENT	+			
) 	(BILATERAL) NODULE (BILATERAL)	- + - +			
			SEMINAL VESICLE	ATROPHY	+ + +			
			ADRENAL GLANDS	ENLARGEMENT (UNILATERAL)	+ +			

1) FATE : Y , KILLED ON SCHEDULE 2) GRADE : NEGATIVE NOT PRESENTED

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

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11-M2-0142 APPENDIX CHRONIC AND CARCINDGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

10 PPM LEVEL AND SEX :

MALE

1 1 1	!	1 1					STUDY NO. 83004
ANIMAL 1) FATE INUMBER	1) FATE	4) DAYS	N	GROSS PATHOLO FIND	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) PROBABLE CAUSE GRADE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0142	>-	735	rung			CALCIFICATION OF VASCULAR WALL	
			KIDNEYS			CHRONIC PROGRESSIVE	‡
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +
			TESTES	SOFTENING (UNILATERAL) + NODULE (UNILATERAL) ++	+ + + +		
			SEMINAL VESICLE	ATROPHY	+ +		
			PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + + + +		

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++, MODERATE +++ , SEVERE 1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE РРМ 10 LEVEL AND SEX :

 	1 1 1	: : : : : : : : : : : : : : : : : : :						STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL	2)3)	HISTOPATHOLOGICAL		
NUMBER	1 1 1 1	1		00017007	GRADE	FINDINGS	GRADE	OF DEATH OR MAJOR
					! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- AINOLOGICAL FINDIN
0143	> -	736	LUNG		Ü	CALCIFICATION OF VASCULAR WAL!	+	
			200				•	
			NIDNETS		_	CHRONIC PROGRESSIVE GLOMERII ONFPHROBATHY (PILATERAL)	+,	
					T I	PIGMENTATION (BLCATER) INFILTRATION OF LEUCOCYTES	+ +	
						(BILATERAL)	+	
			TESTES	ENLARGEMENT (BILATFRAI)	+ + +			
				NODULE (BILATERAL)	+ + +			
		-	SEMINAL VESICLE	АТВОРНУ	+ + +			
			SKIN (SUBCUTIS)	MASS	v			

1) FATE: Y KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

3) GRADE OF MASS:
A × SMALL AND/OR SINGULAR
B × MEDIAL AND/OR SPORADIC
C × LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

1 1 1 1 1 1	!	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1			STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) ATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL EINDINGS
0144	>-	736	SPLEEN	ENLARGEMENT	+ +		! ! ! !	
			LUNG		C	CALCIFICATION OF VASCULAR WALL	+	
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + + +	
			TESTES	NODULE (BILATERAL) ENLARGEMENT (BILATERAL)	+ + + + +			
			SEMINAL VESICLE	АТВОРНУ	+ +		•	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR "MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

	1						STUDY NO. 83004
ANIMAL 1) 4) NUMBER FATE DAYS	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0145 Y	736	LUNG			CALCIFICATION OF VASCUIAD HALL	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TINDINGS
		2			TO ANY COLAR WALL	+	
		KIDNEYS		O TH	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
		TESTES	ATROPHY CHNII ATERALY	+			
			CONTERACY	•			•
			ENLARGEMENT CUNTI ATERAL	+ + +			
			NODULE (BILATERAL)	+ + +			
		PROSTATIC GLAND	ATROPHY	+ + +			
		SEMINAL VESICLE	ATROPHY	+ + +			
		PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + + +			
		SKIN	MASS	В			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

APPENDIX 11-M2-0146

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 10 PPM MALE

	1 1 1 1			1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0146 X	779	HEART	GRAYISH CHANGE	; ; ; ; ; ; ; ; ;	FIBROSIS	; ; ; ; ; ; ;	LEYDIG CELL TUMOR: TESTES
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
		LYMPH NODES (PULM.HILUS)	ENLARGEMENT	+ +			
		SPLEEN			HEMOSIDEROSIS	+	
		LIVER			FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS	+ +	
		KIDNEYS	WHITISH PATCH (BILATERAL)	+	PIGMENTATION (BILATERAL) INTERSTITIAL NEPHRITIS (UNILATERAL) PYELITIS (UNILATERAL)	+ + +	
		TESTES	NODULE (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
		PROSTATIC GLAND	ATROPHY	+ + +	INFLAMMATION	+	
		SEMINAL VESICLE	ATROPHY		АТКОРНҮ	+ +	
		HARDERIAN GLANDS			HYPERSECRETION (BILATERAL)	+	

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE 4) DAYS : AFTER START OF TREATMENT 1) FATE : X , FOUND DEAD

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11-M2-0147 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1	1 1 1 1			1			
ANIMAL 1) 4)	10	(7	ORGAN	GROSS PATHOLOGICAL	2)3)			
NUMBER	7 A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	DAYS		FINDINGS	GRADE	FINDINGS	GRADE	OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0147	>-	Y 736 LUNG	LUNG			CALCIFICATION OF VASCULAR WALL	 	
			KIDNEYS		O	CHRONIC PROGRESSIVE GLOMERII ONFPHROPATHY (RII ATEDAL)	+ + +	
					<u>.</u>	PIGMENTATION (BILATERAL)	+	
					T	INFILIKATION OF LEUCOCYTES (BILATERAL)	+	
			TESTES	NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE	ATROPHY	+			
			THYROID GLANDS	ENLARGEMENT (BILATERAL)	+ +			

. ; 2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE 1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE ΡΡΜ 10 LEVEL AND SEX :

			1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER	DRGAN	GROSS PATHOLOGICAL FINDINGS	GICAL 2)3) INGS GRADE	HISTOPATHOL	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0148 Y 736			 	CALCIFICATION OF VASCULAR WALL	 	
	KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+++	
				PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + + +	
	TESTES	NODULE (BILATERAL) ENLARGEMENT (BILATERAL)	+ + + + +			
	SEMINAL VESICLE	ATROPHY	+ + +			
	EYE BALLS	GRAYISH CHANGE (UNILATERAL)	+			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

	1						STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS		PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0149 Y	736	SPLEEN	ENLARGEMENT	 			
		LUNG	WHITISH PATCH	++	CALCIFICATION OF VASCULAR WALL PAPILLARY ADENOMA	+	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	† † † + +	
		TESTES	ENLARGEMENT (UNILATERAL) NODULE (BILATERAL)	+ + + + +			
		PROSTATIC GLAND	ATROPHY	+++			
		SEMINAL VESICLE	АТВОРНУ	+ + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

3) GRADE OF MASS:
A ' SMALL AND/OR SINGULAR
B ' MEDIAL AND/OR SPORADIC
C ' LARGE AND/OR MULTIPLE

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11-M2-0150 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

	. !					 	STUDY NO. 83004
ANIMAL 1) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0150 W	069	MULTIPLE ORGANS			MONONUCLEAR CELL LEUKEMIA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MONONUCLEAR CELL LEUKEMIA
		THORACIC CAVITY	PLEURAL FLUID	+ +			: MULTIPLE ORGANS KERATOACANTHOMA: SKIN
		ABDOMINAL CAVITY	ASCITES	+			MESOTHELIOMA: PERITONEUM LEYDIG CELL TUMOR: TESTES
		PERITONEUM	NODULE	+ + +	MESOTHELIOMA		ADENOMA: PITUITARY GLAND
		неакт	YELLOWISH CHANGE	+	FIBROSIS MIGRATION OF HEMOSIDERIN-LADEN	+ + +	
					CELLS THROMBOSIS	+ +	
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
		LYMPH NODES			INFLAMMATION	+	
		SPLEEN	ENLARGEMENT	+ +	FIBROSIS	+ +	
		LARYNGOPHARYNX			CYSTIC DILATATION OF GLAND	+	
		LUNG	REDDISH CHANGE	+	THROMBOSIS MIGRATION OF MACROPHAGE IN ALVEOLI	+ + + + +	
		LIVER	YELLOWISH CHANGE ROUGHNESS OF SURFACE SOFTENING	+ + +	FATTY DEGENERATION OF HEPATIC CELLS FOCAL NECROSIS PROLIFERATION OF BILE DUCT WITH FIBROSIS	+ + + + + +	
	! ! ! !	PANCREAS	DISCOLORATION		MIGRATION OF HEMOSIDERIN-LAD	+	
1) FATE:	W KI	LLE	2) GRADE	N H H H H H H H H H H H H H H H H H H H	PRESENTED 3) GRADE B	OF MASS: SMALL AND/OR MEDIAL AND/OR	ASS: AND/OR SINGULAR AND/OR SPORADIC AND/OR MULTIPLE

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CONTINUED	
11-M2-0150	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

10 PPM, MALE LEVEL AND SEX :

ANIMAL 1) 4) ORGAN GRO NUMBER O150 W 690 PANCREAS KIDNEYS BLACI (BILL) SEMINAL VESICLE ATROP PITUITARY GLAND GRAYI (BILL) ADRENAL GLANDS GRAYI (UNI) MAMMARY GLAND			!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		1	STUDY NO. 83004
M 690 PANCREAS KIDNEYS TESTES SEMINAL VESICLE PITUITARY GLAND THYROID GLANDS ADRENAL GLANDS SKIN MAMMARY GLAND	GROSS	PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
S S S S N N N N N N N N N N N N N N N N		; 1 1 1 1 1 1 1 1 1		CELLS		TATHOLOGICAL FINDINGS
S C E	BLACKISH CHANGE (BILATERAL)	HANGE .>	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) (BILTRATION OF LEUCOCYTES	+ + +	
AND	ATROPHY (BILATERAL)			LEYDIG CELL TUMOR (BILATERAL)		
AND S S	NODULE (BI		++			
S S	VESICLE ATROPHY		+	<i>A</i> ,		
S S	RY GLAND ENLARGEMENT HEMORRHAGE		¥ + + +	ADENOMA		
A Š	GLANDS GRAYISH CHANGE (BILATERAL)		+			
	GLANDS ATROPHY (UNILATERAL)	+		HYPERPLASIA OF CORTIC CELLS (BILATERAL) VACUOLAR DEGENERATION OF CORTICAL	* *	
MAMMARY GLAND	MASS NODULE	ω÷	* *	CELLS (BILATERAL) KERATOACANTHOMA		
	GLAND		DI	DILATATION OF GLAND	+	
BRAIN IMPRES	IMPRESSION	+				•

1) FATE : W / KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:
A 'SMALL AND/OR SINGULAR
B 'MEDIAL AND/OR SPORADIC
C 'LARGE AND/OR MULTIPLE

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11-M2-0151 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

! ! ! ! !	1	1			: : : : :		1	STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS	1) FATE		ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE) HISTOPATHOLOGICAL FINDINGS	2) GRADE	CAUSE MAJOR FINDIN
0151		736	2			LCIFICATI	+	
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
			TESTES	ATROPHY (UNILATERAL)	+			
		•		ENLARGEMENT CUNILATERAL)	+			
				NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE	АТКОРНУ	+ + +			
			SKIN	NODULE	++			

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED

+ . SLIGHT ++ . MODERATE +++ . SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 10 PPM LEVEL AND SEX :

1 1 1 1 1 1 1							01110
ANTMA	,		!	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			3.001 NO. 83004
FATE DAYS	TE DA)		GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
	! ! ! ! !			1 1 1 1 1 1 1 1			PATHOLOGICAL FINDINGS
0152	Y 736	2 LUNG				1 1 1 1 1 1 1 1	
				•	CALCIFICATION OF VASCULAR WALL	+	
		KIDNEYS		•			
				J	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (RIIATERAI)	+	
				ш. н	PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES	+ +	
					(DILAIEKAL)		
		TESTES	ATROPHY	+			
			NODULE (BILATERAL)	+ + +			
		SEMINAL VESICLE	АТКОРНУ	+ + +			
		EYE BALLS	GRAYISH CHANGE (UNILATERAL)	+			

1) FATE : Y / KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , NODERATE
+++ , SEVERE

3) GRADE OF MASS:

A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

	1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL NUMBER	1) 4) FATE DAYS) ORGAN S	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE		2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0201	Y 733	LUNG			CALCIFICATION OF VASCULAR WALL	! ! ! ! ! ! ! !	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;
		KIDNEYS	·		CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
		TESTES	ATROPHY (BILATERAL)	+ + +			
		EPIDIDYMIS	ATROPHY (BILATERAL)	+ + +			
		PROSTATIC GLAND	АТВОРНУ	+ + +			
		SEMINAL VESICLE	АТКОРНҮ	+ + +			
		SKIN	MASS SCAB	4 +			
		SKIN (SUBCUTIS)	MASS	ပ		•	
		EYE BALLS	HEMORRHAGE (UNILATERAL)	+ + +			

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE 4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1	!	!			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER	1) ATE	4) DAYS	ORGAN	GICAL INGS	2 GRA	S 5		PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0202	>-	Y 733	SPLEEN	LN	; ; ; ; ; ; ; ; ; ; ; ; ;		 	
			LUNG		J	CALCIFICATION OF VASCULAR WALL	+	
			KIDNEYS		9 EI	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ ++	
			TESTES	ATROPHY (UNILATERAL) NODULE (BILATERAL)	+ + + +			
			SEMINAL VESICLE ATROPHY	ATROPHY	+			

2) GRADE : NEGATIVE NOT PRESENTED 1) FATE: Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

+ / SLIGHT ++ / MODERATE +++ / SEVERE

APPENDIX 11-M3-0203

13. 14. CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 100 PPM MALE

STUDY NO. 83004

THORACIC CAVITY HEMORRHAGE + HEMORRHAGE + HEMORRHAGE + HEMORRHAGE + HEMORRHAGE + HEMORRHAGE + HEMORRHAGE HE	ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE		2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
THORACIC CAVITY HEMORRHAGE ABDOMINAL CAVITY HEMORRHAGE HEART HEMORRHAGE LYMPH NODES CPULM.HILUS) SPLEEN NASAL CAVITY LARYNGOPHARYNX LARYNGOPHARYNX LARYNGOPHARYNX LIVER LIVER KIDNEYS KIDNEYS KIDNEYS TESTES NODULE (UMILATERAL) TESTES THYOUR PRESENTED THY THYOUR PRESENTED THY THY	0203	×	546	MULTIPLE ORGANS		i i i i i	ı		MONON CE FAR COLUMN
ABDOMINAL CAVITY HEMORRHAGE HEART HEMORRHAGE HEART HEMORRHAGE LYMPH NODES (PULM.HILUS) SPLEEN LARYNGOPHARYNX LARYNGOPHARYNX LARYNGOPHARYNX LARYNGOPHARYNX LIVER STOMACH LIVER ENLARGEMENT HEMORRHAGE STOMACH LIVER ENLARGEMENT TESTES NODULE (UNILATERAL) TESTES A PROLIFERATION OF BILE DUCT WITH FIBROSIS CUNILATERAL) TESTES A PROLIFERATION OF BILE DUCT WITH FIBROSIS CUNILATERAL) TESTES STOMACH A PPRENLASIA OF LEYDIG CELLS CONILATERAL) TESTES STOMACH A PRESENTED STADA OF LEYDIG CELLS CONILATERAL) TESTES STOMACH A PRESENTED STADA OF LEYDIG CELLS CONILATERAL) TESTES STOMACH A PRESENTED STADA OF LEYDIG CELLS CONILATERAL) TESTES STOMACH A PRESENTED STADA OF LEYDIG CELLS CONILATERAL) TESTES STOMACH A PRESENTED STADA OF LEYDIG CELLS CONILATERAL) TESTES STOMACH A PRESENTED STADA OF LEYDIG CELLS CONILATERAL) TESTES STOMACH A PROBLE DUCT A PROBLEMATOR OF LEYDIG CELLS CONILATERAL) TESTES STOMACH A PROBLEMATOR OF GASTRIC FAVEOLAE STOMACH A PROBLEMATOR OF GASTRIC FAVEOLAE STOMACH A PROLIFERATION OF BILE DUCT A PROBLEMATOR OF GASTRIC FAVEOLAE STOMACH A PROBLEMATOR OF GASTRIC FAVEO					HEMORRHAGE	+			: MULTIPLE ORGANS LEYDIG CELL THMOR: TESTES
HEART HEART THYMUS THYMUS THYMUS CPULM.HILUS) SPLEEN LYMPH NODES CPULM.HILUS) SPLEEN NASAL CAVITY LARYNGOPHARYNX LARYNGOPHARYNX LUNG HEMORRHAGE *** HEM				ABDOMINAL CAVITY	HEMORRHAGE	+++			
HEART THYMUS THYMUS THYMUS (POULM.HILUS) SPLEEN NASAL CAVITY LARYNGOPHARYNX LARYNGOPHARYNX LUNG HEMORRHAGE LUNG HEMORRHAGE LUNG HEMORRHAGE ++ HEMORRHAGE LUNG HEMORRHAGE ++ PROLIFERATION OF BILE DUCT ++ PROLIFERATION OF BILE DUCT ++ WITH FIBROSIS KIDNEYS KIDNEYS TESTES NODULE (UNILATERAL) * HYPERPLASIA OF LEYDIG CELLS (UNILATERAL) * HYPERPLASIA OF LEYDIG CELLS ** COUND DEAD * * SIGHAT * * * * * * * * * * * * * * * * * * *				DIAPHRAGM			HEMORRHAGE	+ + +	
LYMPH NODES CPULM.HILUS) SPLEEN NASAL CAVITY LARYNGOPHARYNX LARYNGOPHARYNX LUNG HEMORRHAGE ++ HEMORRHAGE ++ HEMORRHAGE THE DUCT THE DUCT HEMORRHAGE THE DUCT HEMORRHAGE THE DUCT THE				HEART			FIBROSIS	+	
LYMPH NODES (PULM.HILUS) SPLEEN NASAL CAVITY LARYNGOPHARYNX LARYNGOPHARYNX LARYNGOPHARYNX HEMORRHAGE ++ HEMORRHAGE LUNG STOMACH LIVER LIVER ADHESION ++ PROLIFERATION OF BILE DUCT ++ WYPERPLASIA OF LEYDIG CELLS (UNILATERAL) TESTES NODULE (UNILATERAL) TESTES NODULE (UNILATERAL) TESTES STOMACH PROLIFERATION OF BILE DUCT ++ HYPERPLASIA OF LEYDIG CELLS (UNILATERAL) TESTES STOMACH PROLIFERATION OF BILE DUCT ++ NYPERPLASIA OF LEYDIG CELLS (UNILATERAL) TESTES NODULE (UNILATERAL) TESTES NODULE (UNILATERAL) TESTES NODULE (UNILATERAL) TESTES STOMACH PROLIFERATION OF BILE DUCT ++ NYPERPLASIA OF LEYDIG CELLS (UNILATERAL) TESTES STOMACH TESTES NODULE (UNILATERAL) TESTES STOMACH TESTES STOMACH THYPERPLASIA OF LEYDIG CELLS THYPERPLASIA OF LEYDIG CELLS THYPERPLASIAN TESTES STOMACH THYPERPLASIAN THYPERPLASIAN TESTES TESTES THYPERPLASIAN T				THYMUS			HEMORRHAGE	+	
LARYNGOPHARYNX LARYNGOPHARYNX LUNG HEMORRHAGE ** HEMORRHAGE *				LYMPH NODES (PULM.HILUS) SPLEEN	ENLARGEMENT	+ +	BLOOD ABSORPTION	+	
LUNG LUNG HEMORRHAGE STOMACH LIVER ADHESION + PROLIFERATION OF BILE DUCT + WITH FIBROSIS KIDNEYS KIDNEYS TESTES NODULE (UNILATERAL) TESTES NODULE (UNILATERAL) + HYPERPLASIA OF LEYDIG CELLS (UNILATERAL) + A SLIGHT + SLIGHT + SLIGHT B / A / B / B				NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+ +	
LUNG STOMACH LIVER ADHESION + PROLIFERATION OF GASTRIC FAVEOLAE LIVER ENLARGEMENT + PROLIFERATION OF BILE DUCT ++ WITH FIBROSIS PIGMENTATION (BILATERAL) TESTES NODULE (UNILATERAL) TESTES NODULE (UNILATERAL) + HYPERPLASIA OF LEYDIG CELLS (UNILATERAL) + ASLIGHT + SLIGHT + SLIGHT H A MODERATE S GRADE : NEGATIVE NOT PRESENTED THE STANDAL OF THE				LARYNGOPHARYNX			HEMORRHAGE	+	
LIVER ADHESION + PROLIFERATION OF GASTRIC FAVEOLAE LIVER ENLARGEMENT ++ WITH FIBROSIS KIDNEYS KIDNEYS TESTES NODULE (UNILATERAL) + HYPERPLASIA OF LEYDIG CELLS (UNILATERAL) TESTES STADT OF TREATMENT TO GRADE: NEGATIVE NOT PRESENTED THE STADT OF TREATMENT THE STA				LUNG	HEMORRHAGE	++	HEMORRHAGE	++	
KIDNEYS KIDNEYS KIDNEYS KIDNEYS KIDNEYS KOUND DEAD TESTES KOUND DEAD THE MITH FIBROSIS HAVERPLASIA OF LEYDIG CELLS CONILATERAL) TO GRADE: NEGATIVE NOT PRESENTED THE MODERATE THE MODERATE THE MITH FIBROSIS FIRST OF THE MODERATE THE MITH FIBROSIS FIRST OF THE MODERATE				STOMACH			0 F	+	
TESTES NODULE (UNILATERAL) + HYPERPLASIA OF LEYDIG CELLS (UNILATERAL) X FOUND DEAD X FOUND DEAD + SLIGHT A A A + MODERATE B A				LIVER	ADHESION ENLARGEMENT	+ +		+	
TESTES NODULE (UNILATERAL) + HYPERPLASIA OF LEYDIG CELLS (UNILATERAL) : X , FOUND DEAD : X , FOUND DEAD + , SLIGHT + , MODERATE B ,				KIDNEYS			PIGMENTATION (BILATERAL)	+	
: X / FOUND DEAD 2) GRADE : NEGATIVE NOT PRESENTED 3) GRADE : NEGATIVE NOT PRESENTED 4 / SLIGHT 4 / MODERATE B / B / B / B / B / B / B / B / B / B		1	1	TESTES	NODULE (UNILATERAL)		YPERPLASIA OF LEYDIG (UNILATERAL)	+	
. AFIER START OF TREATMENT ++++ SEVERE	1)			(E	2) GRADE	. NEGATIV + , SLI ++ , MOD +++ , SEV	PRESENTED 3)	E OF MASS SMALL AND MEDIAL AND LARGE AND	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC

CONTINUED	
11-M3-0203	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 100 PPM MALE

	2) GRADE	PATHOLOGICAL FINDINGS	LEYDIG CELL TUMOR (UNILATERAL)		(BILATERAL)		+++ +
	HISTOPATHOL		LEYDIG CELL TU		HYPERSECRETION (BILATERAL)	PIGMENTATION	PIGMENTATION
i 	2)3) GRADE			+ +		+ +	
	GROSS PATHOLOGICAL FINDINGS			ENLARGEMENT (BILATERAL)		HEMORRHAGE	
	ORGAN	TESTES		ADRENAL GLANDS	HARDERIAN GLANDS	BRAIN	SPINAL CORD
	ANIMAL 1) 4) RATE DAYS NUMBER	546					
	L 1) FATE	×					
!	ANIMAL	0203					

1) FATE : X , FOUND DEAD

2) GRADE : NEGATIVE NOT PRES

+ , SLIGHT

2) GRADE : NEGATIVE NOT PRESENTED + / SLIGHT ++ / MODERATE +++ / SEVERE

4) DAYS : AFTER START OF TREATMENT

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2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : W , KILLED IN EXTREMIS

3) GRADE OF MASS:

11-M3-0204 APPENDIX CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

100 PPM MALE LEVEL AND SEX : STUDY NO. 83004

1) 4) FATE DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
W 631	PERITONEUM	NODULE	++	MESOTHELIOMA		IAMMARY
	THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+ +	GLAND MESOTHELIOMA: PERITONEUM LEYDIG CELL TUMOR: TESTES
	LYMPH NODES	ENLARGEMENT	+ +			
	SPLEEN			EXTRAMEDULLARY HEMATOPOIESIS	+ +	
	BONE MARROW			ACTIVATION OF HEMATOPOIESIS	÷ *	
	NASAL CAVITY			INFILTRATION OF LEUCOCYTES	* *	
	LUNG			CALCIFICATION OF VASCULAR WALL	÷	
	LIVER	ENLARGEMENT WHITISH PATCH	+ +	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA FOCAL NECROSIS INFILTRATION OF LEUCOCYTES CHOLANGIOFIBROSIS HYPERPLASTIC NODULE	+ + + + + + +	
	KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	
	TESTES	ATROPHY (UNILATERAL) NODULE (UNILATERAL)	+ +	LEYDIG CELL TUMOR (UNILATERAL) ATROPHY (UNILATERAL)	+ +	
	EPIDIDYMIS			ATROPHY (UNILATERAL)	+ +	

CONTINUED	
11-M3-0204	
APPENDIX	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX : STUDY NO. 83004

SEMINAL VESICLE ATROPHY ADRENAL GLAND MAMMARY GLAND MARMARY GLAND BRAIN SEMINAL VESICLE ATROPHY + ATROPH	ANIMAL 1) 4) NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
ATROPHY VACUOLAR DEGENERATION OF CORTICAL CELLS (UNILATERAL) MASS C FIBROADENOMA INFILTRATION OF LEUCOCYTES (BILATERAL) PIGMENTATION PIGMENTATION	0204	M	631	PROSTATIC GLAND			АТВОРНҮ	+	
MASS				SEMINAL VESICLE		+	АТВОРНУ	+ +	
MASS				ADRENAL GLANDS			VACUOLAR DEGENERATION OF CORTICAL CELLS (UNILATERAL)	+	
				MAMMARY GLAND	MASS	υ	FIBROADENOMA		
				HARDERIAN GLANDS			INFILTRATION OF LEUCOCYTES (BILATERAL)	+	
				BRAIN			PIGMENTATION	+	
				SPINAL CORD			PIGMENTATION	+	

1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

11-M3-0205	
PPENDIX	
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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1	1			1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0205	>-	733	SPLEEN	ENLARGEMENT	 			
			LUNG			CALCIFICATION OF VASCULAR WALL	+	
			LIVER	ENLARGEMENT	+ + +			
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	
						PIGMENTATION (BILATERAL)	+	
			TESTES	NODULE (BILATERAL)	+ + +			
			PROSTATIC GLAND	ATROPHY	+ + +			
			SEMINAL VESICLE	ATROPHY	+ + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + / SLIGHT ++ / MODERATE +++ / SEVERE

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11-M3-0206 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1			 			
ANIMAL 10 4) FATE DAYS NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICA FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0206		733	KIDNEYS	·		CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIĠMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	 	
			TESTES	NODULE (BILATERAL)	+ +			
			PITUITARY GLAND	HEMORRHAGE ENLARGEMENT	+ + + + + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

3) GRADE OF MASS:

11-M3-0207 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
. . OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

100 PPM LEVEL AND SEX :

MALE

PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS STUDY NO. 83004 2) GRADE GLOMERULONEPHROPATHY (BILATERAL)
PIGMENTATION (BILATERAL)
INFILTRATION OF LEUCOCYTES
(BILATERAL) CALCIFICATION OF VASCULAR WALL FINDINGS HISTOPATHOLOGICAL CHRONIC PROGRESSIVE 2)3) GRADE +++ + + GROSS PATHOLOGICAL FINDINGS (BILATERAL) HEMORRHAGE ENLARGEMENT IMPRESSION ATROPHY PITUITARY GLAND ORGAN KIDNEYS TESTES LUNG BRAIN 4) DAYS 733 FATE NUMBER ANIMAL

0207

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1 1	1	1			! ! ! ! !		1 1 1 1 1 1	STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0208	>-	733	LUNG			CALCIFICATION OF VASCULAR WALL	+	
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
			TESTES	NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE ATROPHY	ATROPHY	+ + +			

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE 1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

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3) GRADE OF MASS:

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

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ANIMAL 10 4) NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	I	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0500	>-	733	רחאפ		CA	CALCIFICATION OF VASCULAR WALL	+	
			KIDNEYS		O	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES	+ + +	
					•	(BILATERAL)		
			TESTES	NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE	АТВОРНУ	+			
			PITUITARY GLAND	HEMORRHAGE ENLARGEMENT	+ +			

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

, I ! !	! ! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		! ! ! ! !		1 1 1 1 1 1	STUDY NO. 83004
L FAT	1) 4) FATE DAYS	ORGAN		2)3) GRADE		2) GRADE	PR OF D PATHOL
>	733	LUNG	NODULE	! ! ! ! ! !	CALCIFICATION OF VASCULAR WALL	1	
		LIVER	DISCOLORATION	+			
		KIDNEYS			CHRONIC PROGRESSIVE	+	
					GLUMERULONEPHROPAIHY (BILATERAL) INFILTRATION OF LEUCOCYTES	+	
					(BILATERAL) PIGMENTATION (BILATERAL)	+	
		TESTES	NODULE (BILATERAL)	+ + +			
		SEMINAL VESICLE ATROPHY	АТВОРНҮ	+ + +			

0210

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + / SLIGHT ++ / MODERATE +++ / SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

100 PPM LEVEL AND SEX :

MALE

	! ! ! !			! ! ! ! !		 	STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	E DAYS	ORGAN	PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR ATHOLOGICAL FINDINGS
0211 Y	733	LUNG			CALCIFICATION OF VASCULAR WALL +	+	
		LIVER	WHITISH PATCH	+			
		KIDNEYS		ပ	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+ +	
				. ∺	PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
		TESTES	NODULE (BILATERAL)	+ +			
		SEMINAL VESICLE ATROPHY	ATROPHY	+ + +			

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

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11-M3-0212 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					STUDY NO. 83004
ANIMAL RUMBER	1) FATE C	4) DAYS	ORGAN	OGIC	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0212	<i>></i> ∼	734	LUNG			CALCIFICATION OF VASCULAR WALL	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
			KIDNEYS		0 11 11	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES	+ + + ++	
						(BILAIERAL)		
			TESTES	ATROPHY	+			
				NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE	ATROPHY	+ + +			
			PITUITARY GLAND	ENLARGEMENT	+			
			ADRENAL GLANDS	ENLARGEMENT (UNILATERAL)	+			
		*	SKIN (SUBCUTIS)	MASS	ပ			

4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

; ; ;	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		: : : :	STUDY NO. 83004
ANIMAL 1) FATE NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0213	>-	734	LUNG			CALCIFICATION OF VASCULAR WALL	+	
			KIDNEYS			CHRONIC PROGRESSIVE	+	
						GLOMENDENDERHOLATIN (BILATERAL) PIGMENTATION (BILATERAL)	+	
						INFILTRATION OF LEUCOCYTES (BILATERAL)	+	
			TESTES	ATROPHY	+			
				NODULE (BILATERAL)	+ +			
			PITUITARY GLAND	HEMORRHAGE	+			
			ADRENAL GLANDS	ENLARGEMENT (UNILATERAL)	+			
			SKIN (SUBCUTIS)	NODULE	+ +			

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

	1	1 1 1 1						STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) FATE	4 > DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	GR	STOPATHOLOGICAL FINDINGS		PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0214	>-	Y 734 LUNG	LUNG			CALCIFICATION OF VASCULAR WALL	+	
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	
			TESTES	ATROPHY CUNILATERAL) ENLARGEMENT	+ +			
				(UNILATERAL) NODULE (BILATERAL)	+ + +			
			PITUITARY GLAND	HEMORRHAGE ENLARGEMENT	+ + + +			

1) FATE: Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

STUDY NO. 83004

PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS						
RA	 	+				
TOPATHOLOGICAL	N OF VASC	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)				
2)3) GRADE	+		+ + + + + +	+ + +		
GROSS PATHOLOGICAL 2)3) HIS FINDINGS GRADE	DISCOLORATION		ATROPHY (UNILATERAL) NODULE (BILATERAL)	ATROPHY		
ORGAN	LUNG LIVER	KIDNEYS	TESTES	SEMINAL VESICLE	·	
4) DAYS	734					
1) FATE	>					
ANIMAL	0215					

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

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3) GRADE OF MASS:

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1	1			! ! ! ! !			STUDY NO. 83004
ANIMAL	1) 4) FATE DAYS	4) DAYS	ORGAN		2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0216	>-	734	SPLEEN	ENLARGEMENT	! ! ! ! ! ! ! ! !			
			LUNG			CALCIFICATION OF VASCULAR WALL	+	
			PANCREAS	NODULE	+ +			
			KIDNEYS	ROUGHNESS OF SURFACE. (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES	+ ++	
						(BILATERAL)	_	
			TESTES	ATROPHY	+ + +			
				ENLARGEMENT (INTLATERAL)	+			. **
				NODULE (BILATERAL)	+ + +		,	
			SKIN	MASS	Ą			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

! ! ! ! !	! ! !	; ; ; ;			 			STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) FATE	4) DAYS	1	GROSS PATHOLO FIND	2)3) GRADE	HISTOPATHOLOG	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0217	>-	734	SPLEEN	ENLARGEMENT	+ + +			
			rnng			CALCIFICATION OF VASCULAR WALL	+	
			LIVER	DISCOLORATION ROUGHNESS OF SURFACE	+ +			
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+ +	
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ +	
			TESTES	ATROPHY	+			
				NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE	CLE ATROPHY	+ + +			

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS: 2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE 1) FATE: Y XILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

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3) GRADE OF MASS:

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

						YOU'S ON YOURS
ANIMAL 1) 4) NUMBER FATE DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
			1 1 1 1 1 1 1		1	PATHOLOGICAL FINDINGS
0218 Y 734	LUNG			CALCIFICATION OF VASCULAR WALL		
	KIDNEYS					
				CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERA!)	+	
				PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
	TESTES	ATROPHY (UNILATERAL)	+ + +			
		NODULE (UNILATERAL)	+ + +			
	SEMINAL VESICLE	АТВОРНҮ	+ + +			
	THYROID GLANDS	ENLARGEMENT (UNILATERAL)	+			
	SKIN (SUBCUTIS)	MASS	V			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1	1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					STUDY NO. 83004
ANIMAL 12 4)	1)	(7	ORGAN	GROSS PATHOLOGICAL	2)3)	CAL		
NUMBER	T A -	DAYS		FINDINGS	GRADE	FINDINGS	GRADE	OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
	i i i i	 	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
0219	>-	734	LUNG			CALCIFICATION OF VASCULAR WALL	+	
			KIDNEYS	· ·		CHRONIC PROGRESSIVE	++	
						GLOMERULONEPHROPATHY (BILATERAL)		
						PIGMENIALION (BILATERAL) INFILTRATION OF LEUCOCYTES	+ +	
						(BILATERAL)		
			TESTES	NODULE (BILATERAL)	+ + +			
			PROSTATIC GLAND	ATROPHY	+ + +			
			SEMINAL VESICLE	ATROPHY	+ + +			
			SKIN (SUBCUTIS)	MASS	B			

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED

+ / SLIGHT ++ / MODERATE +++ / SEVERE

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11-M3-0220 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

	1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	STUDY NO. 83004
ANIMAL 1) NUMBER FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0220 X	243	MULTIPLE ORGANS			NUCLEAR		I S NONON I I I I I I I I I I I I I I I I I
		ABDOMINAL CAVITY HEMORRHAGE	Y HEMORRHAGE	++			: MULTIPLE ORGANS
		HEART			FIBROSIS	+	
		THYMUS	ENLARGEMENT	+			
		LYMPH NODES	ENLARGEMENT	+			
		LYMPH NODES	ENLARGEMENT	+ +			
		SPLEEN	ENLARGEMENT	+ + +			
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+ +	
		LUNG	EMPHYSEMA	+	CONGESTION	+	
		LIVER	ENLARGEMENT	+			
		TESTES	NODULE (BILATERAL)	+ + +	HYPERPLASIA OF LEYDIG CELLS (UNILATERAL) LEYDIG CELL TUMOR (UNILATERAL)	+	
		BRAIN	HEMORRHAGE	++	LEUKEMIC EMBOLISM	+ +	
		SPINAL CORD		-	LEUKEMIC EMBOLISM	+ +	

4) DAYS : AFTER START OF TREATMENT

1) FATE : X , FOUND DEAD

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

11-M3-0221 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

			.ON YOUTS		STUDY NO.
ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBAB OF DEATH
					PATHOLOGIC

! ! ! !	1 1 1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGIC FIND	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
			# # # # # # # # # # # # # # # # # # #				1 1 1 1 1 1 1	PAIHOLOGICAL FINDINGS
0221	×	641	PERITONEUM	MASS	U	FIBROSARCOMA		
			HEART			FIBROSIS	•	TEXT CONTO
			SPLEEN	ENLARGEMENT	+ + +		+	
			BONE MARROW			ACTIVATION OF HEMATOPOIESIS	+	
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	- · 4	
			rung	CONGESTION	+++	CONGESTION	- +	
			LIVER			PROLIFERATION OF BILE DUCT WITH FIBROSIS	· +	
			KIDNEYS			PIGMENTATION (BILATERAL)	+	
			TESTES	ATROPHY (BILATERAL)	+	HYPERPLASIA OF LEYDIG CELLS (UNILATERAL)	+ +	
			BRAIN			PIGMENTATION	+	
			SPINAL CORD			PIGMENTATION	+	

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE 4) DAYS : AFTER START OF TREATMENT 1) FATE : X , FOUND DEAD

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1 1 1	1						STUDY NO. 83004	
1) FATE	4) DAYS	ORGAN	ATHOLO(SICAL 2)3) HISTO	HISTOPATHOLOGICAL FINDINGS		PROBABLE CAUSE OF DEATH OR MAJOR	
>-	734	LUNG	NODULE	 	++ CALCIFICATION OF VASCULAR WALL PAPILLARY ADENOMA	+		
		LIVER	NODULE	+				
		KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + + + + + +		
		TESTES	NODULE (BILATERAL)	+ + +				
		PROSTATIC GLAND	ATROPHY	+				
		SEMINAL VESICLE ATROPHY	ATROPHY	+				

NUMBER ANIMAL

0222

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

11-M3-0223 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

0223

							STUDY NO. 83004
1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	 2) GRADE	1 1
3	463	HEART		: ! ! ! !	FIBROSIS	+	MEN Y NOW ON THE STATE OF THE S
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
		SPLEEN	ENLARGEMENT	+ + +	EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
		BONE MARROW			ACTIVATION OF HEMATOPOIESIS	+ +	
		LUNG			CALCIFICATION OF VASCULAR WALL HISTIOCYTOSIS	+ +	
		STOMACH			DILATATION OF GASTRIC FAVEOLAE	+	
		LIVER	DISCOLORATION	+ + +	EXTRAMEDULLARY HEMATOPOIESIS	+	
		KIDNEYS	BLACKISH CHANGE (UNILATERAL) MASS (UNILATERAL)	+ 0	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (UNILATERAL) PIGMENTATION (UNILATERAL) MESENCHYMOMA (UNILATERAL)	. + +	
		URINARY BLADDER	HEMORRHAGE	+ +			
		TESTES	ATROPHY (BILATERAL)	+			
	•	SEMINAL VESICLE		1	АТКОРНУ	+	
		PITUITARY GLAND			CYST	+	

4) DAYS : AFTER START OF TREATMENT 1) FATE : W . KILLED IN EXTREMIS

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE

CONTINUED	
11-M3-0223	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

ANIMAL 1) 4) NUMBER O223 W 463	P I AD	HOLOGICAL FINDINGS	ADE	HISTOPATHOLOGICAL FINDINGS HYPERPLASIA OF CHROMOPHOBE CELLS MIGRATION OF HEMOSIDERIN-LADEN CELLS VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	GRADE PATHO + + + + + + + + + + + + + + + + + + +	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
	BRAIN		۵.	PIGMENTATION	+	
						•

4) DAYS : AFTER START OF TREATMENT 1) FATE: W , KILLED IN EXTREMIS

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	!		!		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S
ANIMAL 1) 4) NUMBER FATE DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	OI III	
0224 Y 735 LUNG	LUNG KIDNEYS			CALCIFICATION OF VASCULAR WALL CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
	TESTES	NODULE (BILATERAL)	+ + +			
	SEMINAL VESICLE ATROPHY	ATROPHY	+ + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER	1) TE D#	4) AYS	ORGAN	S PAT	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0225	73	735	Q 2		: ! ! !		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	raimulugical Findings
1			2		Ŭ	CALCIFICATION OF VASCULAR WALL	+	
			KIDNEYS		Ü	CHRONIC PROGRESSIVE	++	
					LH	PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
		·	TESTES	SOFTENING (BILATERAL) NODULE (BILATERAL)	+ +			
		_	PROSTATIC GLAND	NODULE	+ + +			
		ш.	PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + + + +		. •	
		EL .	BRAIN	IMPRESSION	+			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

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3) GRADE OF MASS:

11-M3-0226 APPENDIX CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
 OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER FATE DAYS	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE		2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0226	>-	735	SPLEEN	ENLARGEMENT	+ +		 	1
			LUNG			CALCIFICATION OF VASCULAR WALL ADENOMATOSIS	+ +	
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES	+ ++	
			TESTES	NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE ATROPHY	АТВОРНУ	+ + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

11-M3-0227 APPENDIX CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

100 PPM LEVEL AND SEX :

MALE

	1			1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS)3) DE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0227 Y	735	LUNG			CALCIFICATION OF VASCULAR WALL	+	
		KIDNEYS		0 41	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES	+ ++	
					(BILATERAL)	-	
		TESTES	ENLARGEMENT	+ + +			
			NODULE (BILATERAL)	+ + +			
		SEMINAL VESICLE	ATROPHY	+ + +			
		SKIN (SUBCUTIS)	NODULE	+ +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
++ , SEVERE

11-M3-0228 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1	1 1 1						STUDY NO. 83004
ANIMAL 1) FATE NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	^		2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0228	>	735	LYMPH NODES (PULM.HILUS)	REDDISH CHANGE	 			
			LUNG	•		CALCIFICATION OF VASCULAR WALL	+	
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILEPALION OF LEUCOCYTES	+ + + + ++	
			TESTES	ENLARGEMENT	+ + +	, DILA 1 ERAL)		
				NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE	ATROPHY	+ + +			
			THYROID GLANDS	ENLARGEMENT (UNILATERAL)	+ + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

3) GRADE OF MASS:

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

11-M3-0229 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

	! ! ! !			 			STUDY NO. 83004
ANIMAL 1) NUMBER FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS		PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0229 Y 7	735	rung			LCI	! ! ! ! ! ! ! !	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ ++	
		TESTES	ENLARGEMENT (BILATERAL) NODULE (BILATERAL)	+ + + + + +			
		SEMINAL VESICLE	ATROPHY	+ + +			
		SKIN	MASS	∢			

11-M3-0230 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

	1 1 1	1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL	17	7 7	ORGAN	GROSS PATHOLOGICAL	2)3)	OPATHO		
NUMBER) A Y		FINDINGS	GRADE	SUIGNIA	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
			! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !		1 1 1 1 1 1 1 1		1 1 1 1 1 1	FALHOLOGICAL FINDINGS
0230	> -	735	LUNG	WHITISH PATCH	+	CALCIFICATION OF VASCULAR WALL ADENOMATOSIS	+ +	
			KIDNEYS			CHRONIC PROGRESSIVE	+	
						GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	. +	
			TESTES	NODULE (BILATERAL)	+ +			
			PROSTATIC GLAND	NODULE	+ + +			
			BULBOURETHRAL GLAND	ENLARGEMENT	+			
			PITUITARY GLAND	HEMORRHAGE	+ +			
				ENLARGEMENT	+ + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

3) GRADE OF MASS:

11-M3-0231 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

	!!!!!!!!!!			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4)		ORGAN	GROSS PATHOLOGICAL	2)3)	HISTOPATHOLOGICAL		
NUMBER	n	9	FINDINGS	GRADE	FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0231 Y 73	735 LUNG	(n	NODULE		LCIFICATION OF VASCULAR WALL	; ; ; ; ; ; ; ; ;	TINDING INDING I
					PAPILLARY ADENOMA		
	KIDN	KIDNEYS		Ü	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	
				ш. н	PIGMENTATION (BICATERAL)	+	
				4	(BILATERAL)	+	
	TESTES	ES	ENLARGEMENT (UNILATERA)	÷ +			
			NODULE (BILATERAL)	+ + +			
	SKIN	SKIN (SUBCUTIS)	MASS	œ			

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

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CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1	1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			 		! ! ! ! ! !	STUDY NO. 83004
ANIMAL	1) FATE	ANIMAL 1) 4). FATE DAYS NUMBER	ORGAN		2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0232		7	LUNG	!		CALCIFICATION OF VASCULAR WALL	1	1
			KIDNEYS			CONTROL - INDOE	+	
						GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ + + +	
						INFILTRATION OF LEUCOCYTES (BILATERAL)	+	
			TESTES	SOFTENING (BILATERAL)	+ + +			
			PROSTATIC GLAND NODULE	NODULE	+ + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + / SLIGHT ++ / MODERATE +++ / SEVERE

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1	1 1 1 1	1 1						STUDY NO. 83004
ANIMAL	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS)3) DE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0233	>-	735	רחאפ			CALCIFICATION OF VASCULAR WALL	+	
			KIDNEYS		O	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+ + +	
					H H	PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
			TESTES	ENLARGEMENT	+ + +			
				NODULE (BILATERAL)	++++			
			SEMINAL VESICLE	ATROPHY	+ + +			
			THYROID GLANDS	ENLARGEMENT (UNILATERAL)	+ + +			
			HARDERIAN GLANDS REDDISH CHANGE (UNILATERAL)	REDDISH CHANGE (UNILATERAL)	+			

1) FATE : Y / KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINDGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	i ! !	1 1 1 1 1			-		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
		! ! ! !					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
0234	> -	735	rnng		A C	CALCIFICATION OF VASCULAR WALL ADENOMATOSIS	+ +	
			KIDNEYS		บ _ั	CHRONIC PROGRESSIVE GLOMFRII ONFPHROPATHY (BY) ATERAL	+ +	
					H II	PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
			TESTES	NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE ATROPHY	ATROPHY	+ + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

4

3) GRADE OF MASS:

11-M3-0235 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

	1					; ; ;	STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		: ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !		1 1 1 1 1 1 1 1 1			ום
0235 Y	۲ 735 ا	LUNG		ပ	CALCIFICATION OF VASCULAR WALL	+	1
		KIDNEYS		Ü	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (RIIATEDAL)	+	
				дн	PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES	+ +	
	-	TESTES	SOFTENING (BILATERAL) NODULE (BILATERAL)	+ +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1	:	1			1			STUDY NO. 83004
ANIMAL 1) NUMBER FATE	1) FATE	4) DAYS	0 R G A N	GROSS PATHOLOGICAL FINDINGS	2)3) RADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0236	> -	736	LUNG			CALCIFICATION OF VASCULAR WALL	 	
			KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+ + +	
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + + +	
			URINARY BLADDER	NODULE	+			
			TESTES	ENLARGEMENT	*+ +			
				NODULE (BILATERAL)	++			
			PITUITARY GLAND	ENLARGEMENT	+ + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE ++ , SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

11-M3-0237 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1			1 1 1			STUDY NO. 83004
ANIMAL 1) NUMBER NUMBER	1) 4) FATE DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0237 Y	736	SPLEEN	ENLARGEMENT	+ +			
		LUNG	REDDISH CHANGE ENLARGEMENT	+ +	CALCIFICATION OF VASCULAR WALL ALVEOLITIS	++	
		LIVER	ROUGHNESS OF SURFACE	+			
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + + + + + +	
		TESTES	ATROPHY (BILATERAL) NOBHE (HNTI ATERAL)	+ + + +			
		SEMINAL VESICLE	ATROPHY	: + : +			
		PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + + +			

4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

100 PPM LEVEL AND SEX :

MALE

1 1 1						1	STUDY NO. 83004
FATE	1) 4) FATE DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	B A A
				!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			1
>-	736	LUNG		S	CALCIFICATION OF VASCULAR WALL	+	
		KIDNEYS		U	CHRONIC PROGRESSIVE	+	
				H	GLUMEKULUNEPHROPAIHY (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
		TESTES	NODULE (BILATERAL)	+ + +			
		SEMINAL VESICLE	ATROPHY	+ + +			
		SKIN	NODULE	++			

NUMBER ANIMAL

0238

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

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11-M3-0239 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER FATE DAYS	4) DAYS	ORGAN	A L S	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0239 Y	736	LUNG			CALCIFICATION OF VASCULAR WALL	+	
		KIDNEYS		- -	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	
		TESTES	ENLARGEMENT (BILATERAL) NODULE (BILATERAL)	+ + + + + +			
		SEMINAL VESICLE		+++			
		PITUITARY GLAND	HEMORRHAGE	+			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

3) GRADE OF MASS:
A \ SMALL AND/OR SINGULAR
B \ MEDIAL AND/OR SPORADIC
C \ LARGE AND/OR MULTIPLE

3) GRADE OF MASS:

11-M3-0240 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

	!!!!!!!!		1 1 1			STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	4) ORGAN YS	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	1
> 0/00			!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			PATHOLOGICAL FINDINGS
	7.36 LUNG	NODULE	+	CALCIFICATION OF VASCULAR WALL ADENOMATOSIS	+ +	
	KIDNEYS	CYST (UNILATERAL)	+	CHRONIC PROGRESSIVE	. + + - +	
				GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ + +	
			•	INFILIRATION OF LEUCOCYTES (BILATERAL)	+ + +	
			-	FIBROSIS (UNILATERAL)	++	
	TESTES	ENLARGEMENT	++			
		(BICA!ERAL) NODULE (BILATERAL)	+ +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

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INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

		1					STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER) ORGAN S	N	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	ı	2)	İ
				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2 2 7	UF DEAIH OR MAJOR PATHOLOGICAL FINDINGS
0241 Y 734	o will				!!!	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	
				υ	CALCIFICATION OF VASCULAR WALL	+	
	KIDNEYS			ر			
				ر	GLOMERULONEPHROPATHY (BILATERAL)	+ + +	
				Ω ⊢	PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES	+ -	
					(BILATERAL)	٠	
	TESTES		ENLARGEMENT (BILATERAL)	+ +			
			NODULE (BILATERAL)	+ + +			
	SEMINAL	SEMINAL VESICLE ATROPHY	ATROPHY	+ +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE

2. (*

11-M3-0242 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1 1 1 1			1 1 1 1		 	STUDY NO. 83004
ANIMAL FA NUMBER	1) FATE D	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0242	× ×	227	PERITONEUM	MASS	B	LIPOSARCOMA HEMORRHAGE	+ + +	
			HEART			FIBROSIS	+	,
			BONE MARROW			ACTIVATION OF HEMATOPOIESIS	+ .	
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
			LARYNGOPHARYNX			HYPERSECRETION	+	
			rung			CALCIFICATION OF VASCULAR WALL SWELLING OF ALVEOLAR EPITHELIUM	+ +	
		-	LIVER	DISCOLORATION	+ + +	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT	+ +	
			PANCREAS			REGENERATIVE CHANGE	++	
		_	KIDNEYS			PIGMENTATION (BILATERAL)	+	
		•	TESTES	SOFTENING (BILATERAL)	+			
		<u>u.</u>	PROSTATIC GLAND			INFILTRATION OF LEUCOCYTES	+	
			BRAIN			PIGMENTATION	+	
		•,	SPINAL CORD			PIGMENTATION	+	

3) GRADE OF MASS:	A , SMALL AND/OR SINGULAR	B . MEDIAL AND/OR SPORADIC	C . LARGE AND/OR MULTIPLE
2) GRADE : NEGATIVE NOT PRESENTED	+ > SLIGHT	++ / MODERATE	+++ > SEVERE
1) FATE : X , FOUND DEAD			4) DAYS : AFTER START OF TREATMENT

100 PPM

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CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

	1 1 1 1			i			STUDY NO. 83004
ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJORS PATHOLOGICAL FINALOGE
0243 Y	736	LUNG		! ! ! ! !	CALCIFICATION OF VASCULAR WALL	+	
		KIDNEYS			CHRONIC PROGRESSIVE	+	
					SCOMEROLONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ + +	
		TESTES	ENLARGEMENT (BILATERAL)	++			
			NODULE (BILATERAL)	+ + +			
		BULBOURETHRAL GLAND	ENLARGEMENT	+ +			
		PITUITARY GLAND	HEMORRHAGE ENLARGEMENT	+ + + +			
		ADRENAL GLANDS	ENLARGEMENT (BILATERAL)	+ +			
		MAMMARY GLAND	MASS	v			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + / SLIGHT ++ / MODERATE ++ / SEVERE

2. 3.

11-M3-0244 APPENDIX

CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1			1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) NUMBER FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICA FINDI	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0244 W	769	MULTIPLE ORGANS			MONONUCLEAR CELL LEUKEMIA	 	C-CELL ADENOMA: THYROID
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	GLANDS LEYDIG CELL TUMOR: TESTES MONONICIFAR CFILL FILEMINA
		SPLEEN	ENLARGEMENT	+ + +			: MULTIPLE ORGANS
		BONE MARROW			ACTIVATION OF HEMATOPOIESIS	++	
		NASAL CAVITY			INFLAMMATION	+	
		LUNG	NODULE HEMORRHAGE	+ +	ADENOMATOSIS HEMORRHAGE	+ + +	
		LIVER			FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT	+ +	
		PANCREAS			REGENERATIVE CHANGE	+ +	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	
		TESTES	NODULE (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
		SEMINAL VESICLE	ATROPHY	+	АТКОРНУ	+ +	
		PITUITARY GLAND	HEMORRHAGE	+			
		THYROID GLANDS			C-CELL ADENOMA (UNILATERAL)		

2) GRADE : NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE 4) DAYS : AFTER START OF TREATMENT 1) FATE : W / KILLED IN EXTREMIS

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CONTINUED	
11-M3-0244	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

STUDY NO. 83004	PROBABLE CAUSE OF DEATH OR MAJOR				
	2) GRADE	1	+	+	+
	HISTOPATHOLOGICAL FINDINGS		HYPERSECRETION (BILATERAL)	PIGMENTATION	PIGMENTATION
1	2)3) GRADE	1 1 1 1 1 1 1		Δ.	۵.
	GROSS PATHOLOGICAL FINDINGS				
	ORGAN	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	HARDERIAN GLANDS	BRAIN	SPINAL CORD
1	4) DAYS	1 1 1 1 1 1 1	769 M		
(; ! !	1) FATE	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	3		
1 1 1 1 1	ANIMAL 1) 4) FATE DAYS NUMBER	: : : : : : : : :	0244		

1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

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APPENDIX 11-M3-0245

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 100 PPM MALE

ANIMAL 1) FATE NUMBER	E DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0245 W	671	HEART			FIBROSIS	 	ADENOMA: PITHITABY CLAND
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	Σ.
		SPLEEN			EXTRAMEDULLARY HEMATOPOIESIS	++	GLANDS
		NASAL CAVITY			INFLAMMATION	++	
		LUNG			HISTIOCYTOSIS	+	
		PAROTID GLANDS	·		DEGENERATIVE CHANGE OF ACINI (UNILATERAL)	+ +	
		LIVER	ROUGHNESS OF SURFACE YELLOWISH CHANGE	+ + + +	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA EXTRAMEDULLARY HEMATOPOIESIS FOCAL NECROSIS	+ + + +	
		KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+ + +	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) (BILATERAL) FIBROSIS (BILATERAL)	+ + + + + + +	
		URINARY BLADDER			INFILTRATION OF LEUCOCYTES	+	
		TESTES	ATROPHY (BILATERAL)	++++	ATROPHY (BILATERAL)	+ + +	

3) GRADE OF MASS :	A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE	
2) GRADE : NEGATIVE NOT PRESENTED	+ , SLIGHT ++ , MODERATE +++ , SEVERE	
1) FATE : W , KILLED IN EXTREMIS	4) DAYS : AFTER START OF TREATMENT	

CONTINUED	
11-M3-0245	
APPENDIX	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	!	1 1 1			1		1 1 1	STUDY NO. 83004
ANIMAL	1) FATE	1) 4) FATE DAYS	0RGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0245	3	671	TESTES					
						HYPERPLASIA OF LEYDIG CELLS (UNILATERAL)	+	
						PERIVASCULITIS (BILATERAL)	++	
			EPIDIDYMIS	MASS (UNILATERAL)	Ą	GIANT CELL GRANULOMA (UNILATERAL)	+ + +	
			PROSTATIC GLAND			INFILTRATION OF LEUCOCYTES	+	
			PITUITARY GLAND	HEMORRHAGE ENLARGEMENT	+ + + + + +	ADENOMA		
			ADRENAL GLANDS			VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL) PHEOCHROMOCYTOMA (UNILATERAL)	* + +	
			SKIN	MASS	Ą	SQUAMOUS CELL CARCINOMA		
			BRAIN			DILATATION OF CEREBRAL VENTRICLE HEMORRHAGE	+ +	
			SPINAL CORD			PIGMENTATION	+	

4) DAYS : AFTER START OF TREATMENT

1) FATE : W . KILLED IN EXTREMIS

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

11-M3-0246 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

; ; ; ; ;	1 1 1						1 1 1 1 1	STUDY NO. 83004
ANIMAL 1) 4) NUMBER	1) FATE	4) DAYS	0 R G A N	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0246	>-	736	LUNG		S	CALCIFICATION OF VASCULAR WALL	 	
			KIDNEYS	:	O PH	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES	+ + ++	
						(UNILATERAL)		
			TESTES	ENLARGEMENT (ATIATERAL)	++			
				NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE	ATROPHY	++			
			PITUITARY GLAND	HEMORRHAGE ENLARGEMENT	+ + + +			

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

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2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : W / KILLED IN EXTREMIS

3) GRADE OF MASS:

11-M3-0247 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND

MALE	
w d. d.	
100	
SEX SEX	

STUDY NO. 83004

THYMUS	ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
HYPERPLASIA OF EPITHELIAL EN RETICULUM CELLS EN EXTRAMEDULLARY HEMATOPOIESIS + CACLITY INFLAMMATION CACLIFICATION OF VASCULAR WALL + CACLIFICATION OF WASCULAR WALL + CASSEQUS TISSUE FATY DEGENERATION OF HEPATIC CELLS + SWELLING OF RUPFER CELLS + SWELLING OF RUPFER CELLS + PROLIFERATION OF LEUCOCYTES + HOTHER MANAMATION OF LEUCOCYTES + THE BLADDER INFLITRATION OF LEUCOCYTES + CUNILATERAL) + HENORRHAGE (UNILATERAL) + HENORRHAGE (UNILA	0247	3	540	HEART			FIBROSIS	+	
EXTRAMEDULLARY HEMATOPOIESIS L CAVITY CALCIFICATION OF VASCULAR WALL OSSEOUS TISSUE FATTY DEGENERATION OF HEPATIC CELLS SWELLING OF KUPFFER CELLS PROLIFERATION OF LEUCOCYTES PROLIFERATION OF LEUCOCYTES PROLIFERATION OF LEUCOCYTES PREGNERATIVE CHANGE INFILTRATION OF LEUCOCYTES CUNILATERAL) INFILTRATION OF LEUCOCYTES CUNILATERAL) INFILTRATION OF LEUCOCYTES CUNILATERAL) ARY BLADDER SS HEMORRHAGE CUNILATERAL) HEMORRHAGE CUNILATERAL) ANDULE CUNILATERAL) HEMORRHAGE CUNILATERAL) ANDULATERAL) HEMORRHAGE CUNILATERAL)				THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	FIBRUSARCOMA: SKIN (SUBCUTIS)
CALCIFICATION CALCIFICATION OF VASCULAR WALL OSSEOUS TISSUE FATTY DEGENERATION OF HEPATIC CELLS SWELLING OF KUPFFER CELLS PROLIFERATION OF BILE DUCT INFILTRATION OF LEUCOCYTES REGENERATIVE CHANGE PIGMENTATION OF LEUCOCYTES (UNILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL) ARY BLADDER ANDULE (UNILATERAL) HEMORRHAGE (UNILATERAL) HEMORRHAGE (UNILATERAL) HEMORRHAGE (UNILATERAL)				SPLEEN			EXTRAMEDULLARY HEMATOPOIESIS	+	
CALCIFICATION OF VASCULAR WALL OSSEOUS TISSUE FATTY DEGENERATION OF HEPATIC CELLS SWELLING OF KUPFFER CELLS PROLIFERATION OF LEUCOCYTES INFILTRATION OF LEUCOCYTES REGENERATIVE CHANGE PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL) INFILTRATION OF LEUCOCYTES INFILTRATION OF LEUCOCYTES INFILTRATION OF LEUCOCYTES AND MASS A INFLAMMATION AND MASS A INFLAMMATION				NASAL CAVITY			INFLAMMATION	+	
PATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT INFILTRATION OF LEUCOCYTES REGENERATIVE CHANGE PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL) HEMORATION OF LEUCOCYTES (UNILATERAL) HEMORATION HEMORATION A INFLAMMATION				LUNG			CALCIFICATION OF VASCULAR WALL OSSEOUS TISSUE	+ +	
REGENERATIVE CHANGE PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL) INFILTRATION OF LEUCOCYTES INFILTRATION OF LEUCOCYTES (GLAND MASS A INFLAMMATION				LIVER	·		FATTY DEGENERATION OF HEPATIC CELLS SWELLING OF KUPFFER CELLS PROLIFERATION OF BILE DUCT INFILTRATION OF LEUCOCYTES		
BLADDER NODULE (UNILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL) HEYDIG CELL TUMOR (UNILATERAL) HEMORRHAGE (UNILATERAL) HEMORRHAGE (UNILATERAL) HEMORRHAGE (UNILATERAL)				PANCREAS			REGENERATIVE CHANGE	++	
BLADDER NODULE (UNILATERAL) + LEYDIG CELL TUMOR (UNILATERAL) HEMORRHAGE (UNILATERAL) C GLAND MASS A INFLAMMATION				KIDNEYS				+ +	
NODULE (UNILATERAL) + LEYDIG CELL TUMOR (UNILATERAL) HEMORRHAGE (UNILATERAL) TIC GLAND MASS A INFLAMMATION							INFILTRATION OF LEUCOCYTES	+	
MASS A INFLAMMATION				TESTES	NODULE (UNILATERAL)	+	LEYDIG CELL TUMOR (UNILATERAL) HEMORRHAGE (UNILATERAL)	+ +	
				PROSTATIC GLAND	MASS	A	INFLAMMATION	++	

3) GRADE OF MASS:	A . SMALL AND/OR SINGULAR	B / MEDIAL AND/OR SPORADIC	C > LARGE AND/OR MULTIPLE
2) GRADE : NEGATIVE NOT PRESENTED	+ > SLIGHT	++ \ MODERATE	+++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE: W KILLED IN EXTREMIS

CONTINUED	ICAL STUDY
11-M3-0247 CO	CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT
APPENDIX	IC AND CARCINOGENIC OF METHANOL
	CHRON

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

	PROBABLE CAUSE	OF DEATH OR MAJOR PATHOLOGICAL FINDINGS						
1	5)	GRADE			+ +		+	+
STUDY NO. 83004	HISTOPATHOLOGICAL	FINDINGS			GIANT CELL GRANULOMA	FIBROSARCOMA	PIGMENTATION	PIGMENTATION
:::::::::::::::::::::::::::::::::::::::	2)3)	GRADE	 		G	S	а.	a.
	GROSS PATHOLOGICAL	FINDINGS				MASS		
	ORGAN			PROSTATIC GLAND		SKIN (SUBCUTIS)	BRAIN	SPINAL CORD
! ! ! !	7 7	DAYS	1 ! ! !	240				
; ; ; ;	ANIMAL 1) 4)	α 4 -		м				
!	ANIMA	NUMBER		0247				

APPENDIX 11-M3-0248

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 100 PPM MALE

STUDY NO. 83004

NONDONCELER HEART	ANIMAL FA NUMBER	1) 4) FATE DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
HEART						CELL	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MONONUCLEAR CELL LEUKEMIA
CONGESTION ACTIVATION OF HEMATOPOIESIS BONE MARROW MASAL CAVITY LUNG CONGESTION +++ PHECCHOMOCYTOMA, METASTASIS +++ CONGESTION LUNG CONGESTION +++ PHECCHOMOCYTOMA, METASTASIS +++ PHECCHOMOCYTOMA, METASTASIS +++ PHECCHOMOCYTOMA, METASTASIS +++ PHECCHOMOCYTOMA +++ PHECC			HEART			FIBROSIS	++	: MULTIPLE ORGANS SQUAMOUS CELL CARCINOMA
HONE MARROW MASAL CAVITY LUNG CONGESTION H++ PHECHROMOCYTOMA, METASTASIS ++ CONGESTION ORAL CAVITY ORAL CAVITY ORAL CAVITY TONGUE LIVER LIVER ENLARGEMENT KIDNEVS KIDNEVS ROUGHNESS OF SURFACE (BILATERAL) THYROLD GLANDS TH			LYMPH NODES (PULM.HILUS) SPLEEN	ENLARGEMENT	+ + +		+	: ORAL CAVITY LEYDIG CELL TUMOR: TESTES SQAMOUS CELL PAPILLOMA : SKIN
LUNG CONGESTION LUNG ORAL CAVITY ORAL CAVITY TONGUE LIVER ENLARGEMENT FATTY DEGENERATION OF HEPATIC CELL PROLIFERATION OF BILE DUCT REGENERATION OF HEPATIC CELL GLOMENLOUNEPHROPATHY (BILATERAL) THYROID GLANDS ENLARGEMENT 1) FATE: X FOUND DEAD 2) GRADE: NEGATIVE NOT PRESENTED 1 FATE: X FOUND DEAD 2) GRADE: NEGATIVE NOT PRESENTED 1 FATE: X FOUND DEAD 2) GRADE 4 SEVERE 2) BYSEVERE			BONE MARROW			0 F	+	PHEOCHROMOCYTOMA: ADRENAL GLANDS
LUNG ORAL CAVITY ORAL CAVITY TONGUE LIVER ENLARGEMENT ++ FATTY DEGENERATION OF HEPATIC CELL LIVER ENLARGEMENT +++ FATTY DEGENERATION OF HEPATIC CELL REGENERATION OF BILE DUCT REGENERATIVE CHANGE (BILATERAL) TESTES NODULE (BILATERAL) THYROID GLANDS ENLARGEMENT ++ LEYDIG CELL TUMOR (BILATERAL) ++ SEVERE 1) FATE: X , FOUND DEAD 2) GRADE: NEGATIVE NOT PRESENTED + SLIGHT ++ SEVERE 2) GRADE ++ SEVERE ++ SEVERE 2) GRADE ++ SEVERE 4			NASAL CAVITY			CONGESTION	‡	
TONGUE NODULE + LIVER ENLARGEMENT +++ FATTY DEGENERATION OF HEPATIC CELL LIVER ENLARGEMENT +++ FATTY DEGENERATION OF HEPATIC CELL PANCREAS KIDNEYS ROUGHNESS OF SURFACE + CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) PIGMENTATION (BILATERAL) THYROID GLANDS ENLARGEMENT ++ LEYDIG CELL TUMOR (BILATERAL) 1) FATE : X , FOUND DEAD 2) GRADE : NEGATIVE NOT PRESENTED			LUNG	CONGESTION	+ + +	PHEOCHROMOCYTOMA, METASTASIS CONGESTION	++	
LIVER ENLARGEMENT +++ FATTY DEGENERATION OF HEPATIC CELL PROLIFERATION OF HEPATIC CELL PROLIFERATION OF BILE DUCT REGENERATIVE CHANGE (SILATERAL) TESTES ROUGHNESS OF SURFACE + CHRONIC PROGRESSIVE (BILATERAL) TESTES ROUGHNESS OF SURFACE + LEYDIG CELL TUMOR (BILATERAL) THYROID GLANDS ENLARGEMENT + LEYDIG CELL TUMOR (BILATERAL) THYROID GLANDS ENLARGEMENT + SIGHT THYROID BAD 2) GRADE : NEGATIVE NOT PRESENTED 3) GRADE 4) DAYS : AFTER START OF TREATMENT + SEVERE			ORAL CAVITY			SQUAMOUS CELL CARCINOMA		
PANCREAS RIDNEYS RIDNEYS RIDNEYS ROUGHNESS OF SURFACE + CHRONIC PROGRESSIVE (BILATERAL) TESTES NODULE (BILATERAL) ++ LEYDIG CELL TUMOR (BILATERAL) THYROID GLANDS ROUGHNESS OF SURFACE + CHRONIC PROGRESSIVE (BILATERAL) THYROID GLANDS THYROID GLANDS THYROID GLANDS THYROID FALSENTED 2) GRADE: NEGATIVE NOT PRESENTED + SLIGHT + SLIGHT A A A A A A A A A A A A A A A A A A A			TONGUE	NODULE	+			
KIDNEYS ROUGHNESS OF SURFACE + CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) TESTES NODULE (BILATERAL) ++ LEYDIG CELL TUMOR (BILATERAL) THYROID GLANDS ENLARGEMENT + X FOUND DEAD X A FIRE START OF TREATMENT ++ SEVERE C A CHRONIC PROGRESSIVE GLOMEROPHROPATHY (BILATERAL) + LEYDIG CELL TUMOR (LIVER	ENLARGEMENT	+ + +	HEPATIC DUCT		
KIDNEYS ROUGHNESS OF SURFACE + CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) TESTES NODULE (BILATERAL) ++ LEYDIG CELL TUMOR (BILATERAL) THYROID GLANDS ENLARGEMENT + 1) FATE : X , FOUND DEAD 2			PANCREAS				+ + +	
TESTES NODULE (BILATERAL) ++ LEYDIG CELL TUMOR (BILATERAL) THYROID GLANDS ENLARGEMENT + 1) FATE : X , FOUND DEAD 2) GRADE : NEGATIVE NOT PRESENTED 3) GRADE + , SLIGHT 4 , MODERATE B 4 , MODERATE B 4 , C , C , C , C , C , C , C , C , C ,			KIDNEYS	sn		CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL PIGMENTATION (BILATERAL)		
THYROID GLANDS ENLARGEMENT 1) FATE: X , FOUND DEAD + , SLIGHT 4) DAYS: AFTER START OF TREATMENT 1) THYROID GLANDS START OF TREATMENT 1) THYROID GLANDS START OF TREATMENT 1) THYROID GLANDS START OF TREATMENT 1) THYROID GLANDS START OF TREATMENT 1) THYROID GLANDS START OF TREATMENT			TESTES	NODULE (BILATERAL)	+ +	CELL TUMOR		
1) FATE: X / FOUND DEAD 2) GRADE: NEGATIVE NOT PRESENTED 3) GRADE 4 / SLIGHT A / H / MODERATE 5 DAYS: AFTER START OF TREATMENT C / C / C	! ! ! ! !	; ; ; ; ;	THYROID GLANDS	ENLARGEMENT				
			FOUND DEAD : FOUND SEAD	2) GRADE	NEGATIV + SLI ++ MOD	PRESENTED 3)	ADE OF MASS SMALL ANI MEDIAL ANI	: : : : : : : : : : : : : : : : : : :

CONTINUED 11-M3-0248 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1 1	1	1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL	2)3)	HISTOPATHOLOGICAL	2)	PROBABLE CAUSE
NUMBER	1	; ; ;	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		!			OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0248	×	202	THYROID GLANDS	(UNILATERAL)			1 1 1 1 1 1 1 1	
			ADRENAL GLANDS	ENLARGEMENT (UNILATERAL)	+ + +	PHEOCHROMOCYTOMA (UNILATERAL), PRIMARY		
			SKIN	NODULE	+	SQUAMOUS CELL PAPILLOMA		
			MAMMARY GLAND		-	HYPERPLASIA	+ +	
			BRAIN	HEMORRHAGE	+ +	PIGMENTATION LEUKEMIC EMBOLISM	+ + +	
			SPINAL CORD		6.	LEUKEMIC EMBOLISM PIGMENTATION	+ +	

1) FATE : X , FOUND DEAD

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

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11-M3-0249 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0249	>-	736	LUNG		! ! ! ! ! !	CALCIFICATION OF VASCULAR WALL	+	
			LIVER	WHITISH PATCH	+			•
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + ++	
			TESTES	ENLARGEMENT	+ + +			
				NODULE (BILATERAL)	+ + +			
			SEMINAL VESICLE	АТВОРНУ	++++			
			SKIN	NODULE ULCER	+ + + +			

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + / SLIGHT ++ / MODERATE +++ / SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

4) DAYS : AFTER START OF TREATMENT

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11-M3-0250 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

1 1 1 1	1 1						1	STUDY NO. 83004
ANIMAL 1) ANIMBER	1) FATE	4) DAYS	0RGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE		2) GRADE	PROBABLE OF DEATH O THOLOGICAL
0520	>-	736				CALCIFICATION OF VASCULAR WALL	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			LIVER	NODULE	+ +			
			KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + ++	
			TESTES	ENLARGEMENT (BILATERAL)	+			
			PITUITARY GLAND	HEMORRHAGE ENLARGEMENT	+ +			

4) DAYS : AFTER START OF TREATMENT

1) FATE: Y KILLED ON SCHEDULE

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

> ANIMAL NUMBER

0251

i I	CALCIFICATION OF VASCULAR WALL + CHRONIC PROGRESSIVE ++ GLOMERULONEPHROPATHY (BILATERAL) + PIGMENTATION (BILATERAL) + INFILTRATION OF LEUCOCYTES ++		
 RA		+ + + + + +	+ + +
GROSS PATHOLOGICAL FINDINGS G		ENLARGEMENT (BILATERAL) NODULE (BILATERAL)	ATROPHY
RGAN	LUNG KIDNEYS	TESTES	SEMINAL VESICLE ATROPHY
1 1	736		
1) 4) FATE DAYS	>-		

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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11-M3-0252 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 100 PPM LEVEL AND SEX :

							STUDY NO. 83004
ANIMAL NUMBER	1) 4) FATE DAYS	4) ORGAN YS	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS		
0252	γ 736	THY	ENLARGEMENT	+		! ! ! ! ! !	
		LUNG			CALCIFICATION OF VASCULAR WALL	+	
		KIDNEYS	ROUGHNESS OF SURFACE	+	CHRONIC PROGRESSIVE	+ + +	
					PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES	+ +	
					(BILATERAL)		
		URINARY BLADDER	JER EXPANSION	+			
		TESTES	ENLARGEMENT (BILATERAL) NODULE (BILATERAL)	+ · + + · + + · +			
		PROSTATIC GLAND	IND NODULE	+ + +			
		SKIN (SUBCUTIS)	S) MASS	Ą			

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

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CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			1 1 1			STUDY NO. 83004
ANIMAL FA-	1) 4) FATE DAYS	S ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0301	Y 733	HEART			FIBROSIS		C-CELL ADENOMA: THYROID
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	GLANDS LEYDIG CELL TUMOR: TESTES
		LYMPH NODES (PULM.HILUS)			BLOOD ABSORPTION	+	
		SPLEEN			HEMOSIDEROSIS		-
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LUNG			CALCIFICATION OF VASCULAR WALL	+	
		LIVER	WHITISH PATCH	+	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS	+ +	
		PANCREAS			ATROPHY OF PANCREATIC ACINUS	+ +	
		KIDNEYS		Ŭ	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	
		TESTES	ATROPHY · ; (UNILATERAL)	+ +	LEYDIG CELL TUMOR (BILATERAL)		
			NODULE (BILATERAL)	+ + +			

1) FATE: Y KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

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HYPERPLASIA OF MUCOSAL EPITHELIUM

ATROPHY CYST

SEMINAL VESICLE PROSTATIC GLAND

PITUITARY GLAND

3) GRADE OF MASS:

PRESENTED			
ATIVE NOT	SLIGHT	MODERATE	SEVERE
NEGATI	; +	\ ++	\ +++
••			+
GRADE			
5)			
	•		

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

CONTINUED 11-M4-0301 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE

1000 PPM

LEVEL AND SEX :

STUDY NO. 83004	2)3) HISTOPATHOLOGICAL 2) PROBABLE CAUSE GRADE FINDINGS GRADE OF DEATH OP MAIOR	PATHOLOGICAL FINDINGS	
	GROSS PATHOLOGICAL FINDINGS		
	ORGAN		Y 733 THYROID GLANDS
	ANIMAL 1) 4) FATE DAYS NUMBER	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Y 733
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ANIMAL F NUMBER		0301

C-CELL ADENOMA (UNILATERAL)

11-M4-0302 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

# # # # # # # # # # # # # # # # # # #	1			! ! ! ! !			STUDY NO. 83004
ANIMAL 1) FATE NUMBER	0 4) E DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTO	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0302 Y	733	PERITONEUM	NODULE	+ +	MESOTHELIOMA		MESOTHELIOMA: PERITONEUM
		HEART			FIBROSIS	+	LEYDIG CELL TUMOR: TESTES
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
		LYMPH NODES			BLOOD ABSORPTION	+	
		SPLEEN	NODULE	+	HEMOSIDEROSIS FAT INFILTRATION	+ +	
		BONE MARROW			OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LARYNGOPHARYNX			CYSTIC DILATATION OF GLAND	» +	
		LUNG			CALCIFICATION OF VASCULAR WALL	+	
		SUBLINGUAL GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL) PROLIFERATION OF DUCT (UNILATERAL)	+ +	
		LIVER			FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS	+ + + +	

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE 4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

CONTINUED 11-M4-0302 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

	1			. ! ! ! ! !			STUDY NO. 83004
ANIMAL 1) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR KAJOR PATHOLOGICAL FINDINGS
0302 Y 733		LIVER		; ; ; ; ; ; ; ; ;			
				I	INFILTRATION OF LEUCOCYTES	+	
		KIDNEYS		C H	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
		TESTES	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2				
			(BILATERAL)	++	LEYDIG CELL TUMOR (BILATERAL)		
			NODULE (BILATERAL)	+ +			
		EPIDIDYMIS	NODULE	+			
	-	PROSTATIC GLAND		Ħ	INFLAMMATION	+	
	٠,	SEMINAL VESICLE	АТВОРНУ	+ A_	АТКОРНУ	+	
	-	HARDERIAN GLANDS		Ĭ	INFILTRATION OF LEUCOCYTES (BILATERAL)	+	
	w	BRAIN		PI	PIGMENTATION	+	

1) FATE: Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

APPENDIX 11-M4-0303

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

! ! ! !	! ! !	! ! ! !	! ! ! ! ! ! ! ! !		; ; ; ;			STUDY NO. 83004
ANIMAL	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0303	>-	733	MULTIPLE ORGANS			MONONUCLEAR CELL LEUKEMIA		LEYDIG CELL TUMOR: TESTES
			HEART			FIBROSIS MYOCARDITIS		C-CELL ADENOMA: THYROID GLANDS MONONUCLEAR CELL LEUKEMIA
			THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	: MULTIPLE ORGANS
			SPLEEN			HEMOSIDEROSÍS	+	
		•	NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
			FUNG			CALCIFICATION OF VASCULAR WALL	+	
	, v		LIVER			FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + +	
			KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	÷	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	· *. * *	
			TESTES	NODULE (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
			PROSTATIC GLAND	АТВОРНУ	+ + +			

+ , SLIG ++ , MODE 4) DAYS : AFTER START OF TREATMENT +++ , SEVE

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE

3) GRADE OF MASS:
A , SMALL AND/OR SINGULAR
B , MEDIAL AND/OR SPORADIC
C , LARGE AND/OR MULTIPLE

+

ATROPHY

+ + +

SEMINAL VESICLE ATROPHY

CONTINUED
11-M4-0303
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX : STUDY NO. 83004

PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS								
2) GRADE		+	+	+				
	LL ADENOMA CUNILATER	KERATOSIS	INFILTRATION OF LEUCOCYTES (UNILATERAL)	PIGMENTATION				
2)3) GRADE	+	A		u.				
GROSS PATHOLOGICAL FINDINGS	ENLARGEMENT (UNILATERAL)	MASS						
ORGAN	THYROID GLANDS	SKIN	HARDERIAN GLANDS	BRAIN				
4) DAYS	733							
1) 4) FATE DAYS	>-							
ANIMAL NUMBER	0303							

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

C.C.

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

11-M4-0304 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	!			 			STUDY .NO. 83004
ANIMAL 1) FATE NUMBER	DAYS	ORGAN	S I	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0304 Y	733	HEART			FIBROSIS	; ; ; ; ; ; ; ; ;	LEYDIG CELL TUMOR: TESTES
		THYMUS	•	•	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	*	
		SPLEEN			CONGESTION HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+++	
		NASAL CAVITY	•		INFILTRATION OF LEUCOCYTES	+	
		LIVER			FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS GRANULATION PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	++++ +	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	
		TESTES	ATROPHY (UNILATERAL) NODULE (BILATERAL)	+ + + + + +	LEYDIG CELL TUMOR (BILATERAL)		
		PROSTATIC GLAND			INFLAMMATION	+ + +	
		SEMINAL VESICLE	ATROPHY	+ + +	АТКОРНҮ	.	-
		PITUITARY GLAND	HEMORRHAGE	+	HEMORRHAGE	+	
1) FATE	E : Y	KILLED ON SCHEDULE	LE 2) GRADE	NEGATIVE	NOT PRESENTED 3) GRADE	OF MASS	

2) GRADE : NEGATIVE NOT PRESENTED

+ SLIGHT ++ MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

CONTINUED	
11-M4-0304	
APPENDIX	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL: STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

0304

ANIMAL NUMBER

STUDY NO. 83004

PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS							
2) GRADE	; ; ; ; ; ; ; ; ; ;	+					
π •	INFILTRATION OF LEUCOCYTES (UNILATERAL)	PIGMENTATION					
GROSS PATHOLOGICAL 2 FINDINGS GRA							
ORGAN G	HARDERIAN GLANDS	BRAIN					
4) DAYS	733						
- 1) FATE	>						

11-M4-0305 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

	1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
٧. 5050	733	HEART		L	FIBROSIS	+	FIBROSARCOMA: SKIN
		THYMUS		<u>.</u>	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	LEYDIG CELL TUMOR: TESTES
		SPLEEN		<u> </u>	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
		BONE MARROW		0	OSTEOGENESIS	+	
		NASAL CAVITY		H	INFILTRATION OF LEUCOCYTES	+	
		LUNG		S	CALCIFICATION OF VASCULAR WALL	+	
		LIVER		<u> гис</u> н	FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + +	
		KIDNEYS	<u>.</u>		CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ ++	
		TESTES	ENLARGEMENT (BILATERAL) SOFTENING (UNILATERAL) +++		LEYDIG CELL TUMOR (BILATERAL)		

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE 1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

T W A I		N C O O O					STUDY NO. 83004
FATE NUMBER	FATE DAYS		GKUSS PAIHULUGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
: :	•			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PATHOLOGICAL FINDINGS
-	/33	TESTES	NODULE (BILATERAL)	+ + +			
		PROSTATIC GLAND			ATROPHY	+	
					HYPERPLASIA OF MUCOSAL EPITHELIUM	+ +	
		SEMINAL VESICLE ATROPHY	АТВОРНУ	+			
		SKIN (SUBCUTIS)	MASS	v	FIBROSARCOMA		

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

.

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

APPENDIX 11-M4-0306

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

	1			; ; ; ;			STUDY NO. 83004
ANIMAL 1) NUMBER FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0306 Y	733	THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
		SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	LEYDIG CELL TUMOR: TESTES
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LUNG			CALCIFICATION OF VASCULAR WALL	+	
		LIVER			FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + +	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	
		TESTES	NODULE (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
		PROSTATIC GLAND	•		HYPERPLASIA OF MUCOSAL EPITHELIUM	+	
		SEMINAL VESICLE	ATROPHY	+ + +	АТВОРНУ	++	
		MAMMARY GLAND	MASS	U	FIBROADENOCARCINOMA		
		HARDERIAN GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	

3) GRADE OF MASS:

2) GRADE : NEGATIVE NOT PRESENTED

+ / SLIGHT ++ / MODERATE +++ / SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : W . KILLED IN EXTREMIS

APPENDIX 11-M4-0307

11

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		!			1			STUDY NO. 83004
ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE) HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0307	M	069	MULTIPLE ORGANS		 	MONONUCLEAR CELL LEUKEMIA		MONONICI FAR CFILL FEINERLA
			LYMPH NODES	ENLARGEMENT	*			
			LYMPH NODES	ENLARGEMENT	* + +			<<
			SPLEEN	ENLARGEMENT	+	CONGESTION	+	LEYDIG CELL TUMOR: TESTES
			BONE MARROW			OSTEOGENESIS ACTIVATION OF HEMATOPOIESIS	+ +	
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	*	
			LARYNGOPHARYNX			CYSTIC DILATATION OF GLAND	+	
			LUNG			HEMORRHAGE	÷ +	
			LIVER	ROUGHNESS OF SURFACE	÷	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS FOCAL NECROSIS	+ + + + + +	
			KIDNEYS			PIGMENTATION (BILATERAL)		
			TESTES	NODULE (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
			PROSTATIC GLAND			HYPERPLASIA OF MUCOSAL EPITHELIUM	+	
			SEMINAL VESICLE			АТКОРНУ	*	-
•			SKIN (SUBCUTIS)	MASS	ပ	FIBROSARCOMA		
1 1 1 1 1 1 1 1	1							

CONTINUED
11-M4-0307
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1	!			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUDY NO. 83004	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		!		TALHOLOGICAL FINDINGS	1 1 1 1 1	PAIHOLOGICAL FINDINGS
0307	3	069	HARDERIAN GLANDS		-	HYPERSECRETION (UNILATERAL)	+	
			BRAIN	HEMORRHAGE	+	HEMORRHAGE	+ + +	
			SPINAL CORD		_	HEMORRHAGE	+ + +	

1) FATE : W . KILLED IN EXTREMIS

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

4) DAYS : AFTER START OF TREATMENT

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2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

APPENDIX 11-M4-0308

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

STUDY NO. 83004

ANIMAL 1) NUMBER	4) DAYS	1) 4) ORGAN GROSS PATHOLOG TE DAYS FINDI	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	CRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0308 Y	733	HEART		u.	FIBROSIS	+	LEYDIG CELL TUMOR: TESTES
		THYMUS		I	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
		SPLEEN		OIU	CONGESTION HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + +	•
		BONE MARROW		0	OSTEOGENESIS	+	
		NASAL CAVITY		H	INFILTRATION OF LEUCOCYTES	+	
		LARYNGOPHARYNX		ပ	CYSTIC DILATATION OF GLAND	+	
		LUNG		J	CALCIFICATION OF VASCULAR WALL	+	
		LIVER		т опо т	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS HYPERPLASTIC NODULE	+++++	
		PANCREAS		A	ATROPHY OF PANCREATIC ACINUS	+	
		KIDNEYS		5 -	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	

3) GRADE OF MASS:

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

CONTING
11-M4-0308
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	: : : : : : : : : : : : : : : : : : :					
ANIMAL 1) 4) NUMBER	4))AYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0308 Y 7	733	KIDNEYS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
		TESTES	ATROPHY (UNILATERAL) FNI ARGFMFNT	+ +	LEYDIG CELL TUMOR (BILATERAL)	. *	
			CUNILATERAL) NODULE (BILATERAL)	+ + +			
		PROSTATIC GLAND			INFLAMMATION	+	
		SEMINAL VESICLE	ATROPHY	+ +	АТКОРНУ	+	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

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11-M4-0309 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

	 			: : : : : :		! ! ! ! !	STUDY NO. 83004
ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	0 11 0
M 6020	574	HEART	•		FIBROSIS	+	
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
		SPLEEN		-	HEMOSIDEROSIS	+ +	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LUNG		O	CALCIFICATION OF VASCULAR WALL	+	
		STOMACH		I	INFLAMMATION	+	
		LIVER	DISCOLORATION	+++	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT INFILTRATION OF LEUCOCYTES	+ + + + S	
		PANCREAS		I	INFILTRATION OF LEUCOCYTES	+	
		KIDNEYS		O I	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
		TESTES		I	HYPERPLASIA OF LEYDIG CELLS (BILATERAL)	+	
	•	SEMINAL VESICLE		¥	АТВОРНҮ	+	
		EYE BALLS		ပ	CALCIFICATION, SCLERA (UNILATERAL)	+	
1) FATE 4) DAYS	W KI	KILLED IN EXTREMIS ER START OF TREATMENT	2) GRADE	NEGATIVE N + SLIGHT ++ MODERA	NOT PRESENTED 3) IT ATE	GRADE OF MASS: A × SMALL AND/OR B × MEDIAL AND/OR C × LARGE AND/OR	OF MASS: SMALL AND/OR,SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

3) GRADE OF MASS:

CONTINUED	C INHALATION TOXICOLOGICAL STUDY
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11-M4-0309	INHALATION
APPENDIX	CHRONIC AND CARCINOGENIC I
	AND
	CHRONIC

INDIVIDUAL PATHOLOGICAL FINDINGS OF METHANOL IN FISCHER RAT

MALE 1000 PPM LEVEL AND SEX :

1	3. E	JOR			
STUDY NO. 83004	PROBABLE CAUSE	OF DEATH OR MAJOR PATHOLOGICAL FINDINGS			
	2)	GRADE		+	+
	HISTOPATHOLOGICAL	FINDINGS		HYPERSECRETION (BILATERAL)	ASTROCYTOMA PIGMENTATION
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	2)3)	GRAUE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ι	+ +
	GROSS PATHOLOGICAL	CONTINUES		ANDS	HEMORRHAGE EDEMA
	ORGAN			HARDERIAN GLANDS	BRAIN
! ! ! !	4)) ! - !		W 574	
! ! !	1) FATE	1 1 2 1 3 1 4 1		3	
; ; ; ; ;	ANIMAL 1) 4)	NUMBER		0309	

1) FATE : W , KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ ' SLIGHT
++ ' MODERATE
+++ ' SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1				1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL F, NUMBER	1) FATE (4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	E CA OR M L FI
0310	, - -	733	HEART			FIBROSIS	+	
			THYMUS		-	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	LEYDIG CELL TUMOR: TESTES
			LYMPH NODES			BLOOD ABSORPTION	+	
			SPLEEN	ENLARGEMENT	+	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
			BONE MARROW		J	OSTEOGENESIS	+	
			NASAL CAVITY		1	INFILTRATION OF LEUCOCYTES	+	
			LARYNGOPHARYNX		5	CYSTIC DILATATION OF GLAND	+	
			rung		0 11	CALCIFICATION OF VASCULAR WALL INFILTRATION OF LEUCOCYTES	+ +	
			LIVER			FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA EXTRAMEDULLARY HEMATOPOIESIS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + + 0	
			KIDNEYS		S	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	

1) FATE: Y XILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

1,7

3) GRADE OF MASS:

CONTINUED 11-M4-0310 APPENDIX

V.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1	1 1 1 1			1			STUDY NO. 83004
ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0310	>-		KIDNEYS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	; ; ; ; ; ; ; ;		 	
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
			TESTES	ATROPHY (UNILATERAL) NODULE (UNILATERAL)	+ + + + + +	LEYDIG CELL TUMOR (UNILATERAL) HYPERPLASIA OF LEYDIG CELLS (UNILATERAL)	+	
			SEMINAL VESICLE			ATROPHY	+	
			PITUITARY GLAND	E NL ARGEMENT H EMORRHAGE	+ +	ADENOMA		
		-	MAMMARY GLAND			DILATATION OF GLAND	+	
		_	HARDERIAN GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + . SLIGHT + . MODERATE +++ . SEVERE

11-M4-0311 APPENDIX

N.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			1 1 1 1 1 1 1			DY NO. 83
ANIMAL 1) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0311 W	720	MULTIPLE ORGANS					MALIGNANT LYMPHOMA
		HEART		_	FIBROSIS	+	: MULTIPLE ORGANS
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	· +	יייין לברר ייייטאיי ובאופא
		LYMPH NODES (PULM.HILUS)			BLOOD ABSORPTION	+	
		SPLEEN	ENLARGEMENT	++++	EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
		BONE MARROW		0	OSTEOGENESIS	+	
		NASAL CAVITY		I	INFILTRATION OF LEUCOCYTES	+	
		LARYNGOPHARYNX		S	CYSTIC DILATATION OF GLAND	+	
		FUNG	•	ပ	CALCIFICATION OF VASCULAR WALL	+	
		LIVER	ENLARGEMENT NODULE	+ + +	PROLIFERATION OF BILE DUCT FIBROSIS FATTY DEGENERATION OF HEPATIC CFIIS	+ + + + + - ~	
		PANCREAS		A	ACINUS		
		KIDNEYS		υ	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	
		TESTES	ATROPHY (BILATERAL)	+	LEYDIG CELL TUMOR (BILATERAL)		
1) FATE	` A	KILLED IN EXTREMI	<u>S</u> 2) GRADE :	NEG/	PRESENTED 3) G	E OF MASS:	
4) DAYS	: AFTER	ER START OF TREATMENT	+	++ / MODERATE +++ / SEVERE	. B U	MEDIAL AN	MEDIAL MND/OR SPORADIC LARGE AND/OR MULTIPLE

CONTINUED
11-M4-0311
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

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3) GRADE OF MASS :	A SMALL AND LOB STAGILLAB	B MEDIAL AND OR SPORANT	C . LARGE AND/OR MULTIPLE	
2) GRADE : NEGALIVE NOT PRESENTED	+ > SLIGHT	++ / MODERATE	+++ SEVERE	

4) DAYS : AFTER START OF TREATMENT

3) GRADE OF MASS:

LEYDIG CELL TUMOR (UNILATERAL)

NODULE CUNILATERAL)

ADENOMA ATROPHY

PITUITARY GLAND ENLARGEMENT

SEMINAL VESICLE

TESTES

11-M4-0312 APPENDIX CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

4) DAYS

1) FATE

ANIMAL NUMBER 559

3

0312

STUDY NO. 83004

ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
THYMUS		: 1 1 1 1 1 1 1	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	I I I I I I I	SEBACEOUS SQUAMOUS CELL CARCINOMA: SKIN
LYMPH NODES	ENLARGEMENT	+	INFILTRATION OF LEUCOCYTES	+	LEYDIG CELL TUMOR: TESTES ADENOMA: PITUITARY GLAND
SPLEEN			HEMOSIDEROSIS	+ + +	
BONE MARROW			OSTEOGENESIS	+	
NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
LUNG			CALCIFICATION OF VASCULAR WALL	+	
PAROTID GLANDS	ENLARGEMENT (UNILATERAL)	+			
LIVER			FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT	+ + 6	
KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	

4) DAYS : AFTER START OF TREATMENT

1) FATE : W , KILLED IN EXTREMIS

2) GRADE : NEGATIVE NOT PRESENTED

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CONTINUED 11-M4-0312 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

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ANIMAL 1) 4) NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOG	2)3) GRADE	ICAL 2)3) HISTOPATHOLOGICAL NGS GRADE FINDINGS 	2) GRADE	2) PROBABLE CAUSE GRADE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0312	3	559	PITUITARY GLAND	REDDISH CHANGE	+			
		•	SKIN	MASS	⋖	SEBACEOUS SQUAMOUS CELL CARCINOMA		
			HARDERIAN GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	

1) FATE : W , KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

HEART HEART BONE MARROW LARYNGOPHARYNX LLUNG KIDNEYS FINDINGS FINDING	(7	WV980 (7				! ! ! !	STUDY NO. 83004
FIBROSIS GELS GELS HYPERPLASIA OF HEMOSIDERIN-LADEN HYPERPLASIA OF EPITHELIAL HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS INFILTRATION OF GLAND CALCIFICATION OF VASCULAR WALL SWELLING OF ALVEOLAR EPITHELIUM FATTY DEGENERATION OF HEPATIC CELLS NTH FIBROSIS INFILTRATION OF LOCOCYTES HYPERPLASIA CALCIFICATION OF LEUCOCYTES HARDSIDEROSIS CARONIC PROGRESSIVE CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) HARDSIDEROSIS HARDSIDEROSIS CALCIFICATION OF LEUCOCYTES HARDSIDEROSIS HARDSIDEROSIS CALCIFICATION OF LEUCOCYTES HARDSIDEROSIS HARDSIDERO	1		GRUSS PAIHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
HYPERPLASIA OF EPITHELIAL HENDSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS OSTEOGENESIS INFILTRATION OF LEUCOCYTES CALCIFICATION OF HEPATIC SWELLING OF ALVEOLAR WALL FATTY DEGENERATION OF HEPATIC CELLS + WITH FIBROSIS INFILTRATION OF LEUCOCYTES + CALCIFICATION OF LEUCOCYTES + SWELLING OF ALVEOLAR EPITHELIUM + FATTY DEGENERATION OF HEPATIC CELLS + WITH FIBROSIS INFILTRATION OF LEUCOCYTES + SANCRERA CHRONIC PROGRESSIVE CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) +		HEART		. π.Σ		; ; ; ; ; ; ; ; ;	ISLET-CELL ADENOMA : PANCREAS
HENDSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS OSTEOGENESIS INFILTRATION OF LEUCOCYTES CALCIFICATION OF VASCULAR WALL SWELLING OF ALVEOLAR EPITHELIUM FATTY DEGENERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES * FATTY DEGENERATION OF LEUCOCYTES STET-CELL ADENOMA EXOCRINE ADENOMA CHRONIC PROGRESSIVE * * * * * * * * * * * * *	_	THYMUS		I	YPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	••
INFILTRATION OF LEUCOCYTES CYSTIC DILATATION OF GLAND CALCIFICATION OF VASCULAR WALL SWELLING OF ALVEOLAR EPITHELIUM FATTY DEGENERATION OF HEPATIC CELLS + PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES + ISLET-CELL ADENOMA EXOCRINE ADENOMA CHRONIC PROGRESSIVE + GLOMERULONEPHROPATHY (BILATERAL)	(C)	SPLEEN		ΞШ	HEMATOPOIESI	+ +	CELL TUMOR
TOYSTIC DILATATION OF LEUCOCYTES CYSTIC DILATATION OF GLAND CALCIFICATION OF VASCULAR WALL SWELLING OF ALVEOLAR EPITHELIUM FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES ISLET-CELL ADENOMA EXOCRINE ADENOMA CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	ω	3ONE MARROW		Ö		+	
CALCIFICATION OF GLAND CALCIFICATION OF VASCULAR WALL SWELLING OF ALVEOLAR EPITHELIUM FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES ISLET-CELL ADENOMA EXOCRINE ADENOMA CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	z	ASAL CAVITY	•	I	NFILTRATION OF LEUCOCYTES	. +	
CALCIFICATION OF VASCULAR WALL SWELLING OF ALVEOLAR EPITHELIUM FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES ISLET-CELL ADENOMA EXOCRINE ADENOMA CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	_	ARYNGOPHARYNX		5	YSTIC DILATATION OF GLAND	+	
FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES ISLET-CELL ADENOMA EXOCRINE ADENOMA CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)		UNG		73 8 ¹ / ₈	ALCIFICATION OF VASCULAR WALL JELLING OF ALVEOLAR EPITHELIUM	+ +	
S E E E E C C C C	J	IVER		ARG NI	ATTY DEGENERATION OF HEPATIC CELLS ROLIFERATION OF BILE DUCT LITH FIBROSIS		
3	ā.	ANCREAS		IS	iLET-CELL ADENOMA OCRINE ADENOMA		
	\overline{z}	IDNEYS		H)	RONIC PROGRESSIVE LOMERULONEPHROPATHY (BILATERAL)	+	

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE: NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE

4) DAYS : AFTER START OF TREATMENT

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CONTINUED 11-M4-0313 APPENDIX

CHRONIC AND CARCINGENIC ÍNHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

: : : : : : : : : : : : : : : : : : : :	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!				1		1 1 1 1	SIUDY NO. 83004
ANIMAL 1) 4) FATE DAYS	1) :ATF	4) 0 A Y S	ORGAN	GROSS PATHOLOGICAL	2)3)		5)	PROBABLE CAUSE
NUMBER					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TINDINGS	GRADE	OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0313	>-	Y 733	KIDNEYS			! ! !	; ; ; ; ; ; ;	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !
						INFILTRATION OF LEUCOCYTES (BILATERAL)	+	
			TESTES	NODULE (BILATERAL)	+++	LEYDIG CELL TUMOR (BILATERAL)		
			SEMINAL VESICLE	ATROPHY	+++	АТКОРНУ	+	
			THYROID GLANDS		<u></u>	HYPERPLASIA OF C-CELLS (UNILATERAL)	· +	
			ADRENAL GLANDS		ш	PHEOCHROMOCYTOMA (UNILATERAL)		
			BRAIN		ŭ.	PIGMENTATION	+	

1) FATE: Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

3) GRADE OF MASS: '
A ' SMALL AND/OR SINGULAR
B ' MEDIAL AND/OR SPORADIC
C ' LARGE AND/OR MULTIPLE

~<u>}</u>;

APPENDIX 11-M4-0314

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1			STUDY NO. 83004
ANIMAL FA NUMBER	1) 4) FATE DAYS) ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0314	Y 734	HEART			I	 	ADENOMA: PITHITARY GLAND
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	PHEOCHROMOCYTOMA: ADRENAL GLANDS LIPOSARCOMA: SKIN
		SPLEEN	ENLARGEMENT	+	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	(SUBCUITIS) LEYDIG CELL TUMOR: TESTES
		BONE MARROW			OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LARYNGOPHARYNX			CYSTIC DILATATION OF GLAND	+	
		TRACHEA			CYSTIC DILATATION OF GLAND	+	
		LUNG			CALCIFICATION OF VASCULAR WALL	+	
		LIVER	NODULE	+ +	FATTY DEGENERATION OF HEPATIC CELLS HYPERPLASTIC NODULE GRANULATION SMALL GRANULOMA PROLIFERATION OF BILE DUCT	+ + + + +	
		KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	INFILTRATION OF LEUCOCYTES (BILATERAL) CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+ + + +	

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ NODERATE
+++ SEVERE 1) FATE : Y , KILLED ON SCHEDULE . 4) DAYS : AFTER START OF TREATMENT

APPENDIX 11-M4-0314 CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

STUDY NO. 83004

ANIMAL F NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0314	· -	734	KIDNEYS		1 1 1 1 1 1	PIGMENTATION (BILATERAL)	+	
			TESTES	ATROPHY (UNILATERAL) NODULE (BILATERAL)	+ + + + + +	LEYDIG CELL TUMOR (BILATERAL)		
			PROSTATIC GLAND	ATROPHY	+			
			SEMINAL VESICLE	ATROPHY	+	АТВОРНУ	+	
			PITUITARY GLAND	HEMORRHAGE	+	ADENOMA		
			ADRENAL GLANDS	ENLARGEMENT (UNILATERAL)	+ +	PHEOCHROMOCYTOMA (UNILATERAL)		
			SKIN (SUBCUTIS)	MASS	. 0	LIPOSARCOMA		
			HARDERIAN GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
			BRAIN			PIGMENTATION	+	

1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + / SLIGHT ++ / MODERATE +++ / SEVERE

4) DAYS : AFTER START OF TREATMENT

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APPENDIX 11-M4-0315

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER	ORGAN	GROSS PA	PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PRO OF DE
0315 Y 734	HEART			- <u></u>	OF HEMOSIDE	DEN ++	PAPILLARY ADENOCARCINOMA : LUNG ADFNOMA: PITHITABY CLAND
	THYMUS			~ .	MYOCARDITIS HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+ +	C-CELL ADENOMA: THYROID GLANDS
	SPLEEN			<u> </u>	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESI	+ +	
	NASAL CAVITY			H	INFILTRATION OF LEUCOCYTES	+	
	LARYNGOPHARYNX			0	CYSTIC DILATATION OF GLAND	+	
	רחאפ	NODULE		++	PAPILLARY ADENOCARCINOMA CALCIFICATION OF VASCULAR W	WALL +	
	LIVER			кока	RAT: OMA Y OF N OF	C CELLS ++ LS ++ ++	
	KIDNEYS	٠	•		INFILIRATION OF LEUCOCYTES INFILTRATION OF LEUCOCYTES (BILATERAL) CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (RTIATFRAL)	+ + +	
	TESTES			I	EYDIG	+	
1) FATE : Y ,	: Y , KILLED ON SCHEDULE : AFTER START OF TREATMENT	L E MENT	2) GRADE :	NEGATIVE NOT + SLIGHT ++ MODERATE ++ SEVERE	E NOT PRESENTED 3) GHT ERATE	GRADE OF MASS: A . SMALL AND/OR S B . MEDIAL AND/OR C . LARGE AND/OR P	ISS: AND/OR SINGULAR AND/OR SPORADIC AND/OR MULTIPLE

CONTINUED
11-M4-0315
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

> ANIMAL NUMBER

0315

1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			! ! ! ! ! !		 	STUDY NO. 83004	
ا ت	1) ATE	1) 4) FATE DAYS			2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	BABLE CAUSE ATH OR MAJOR GICAL FINDINGS	
 	:		1 1 1 1 1 1 1		! ! ! ! !	1			
	>	/34	IESTES			(BILATERAL)			
			SEMINAL VESICLE	ENLARGEMENT					
			PITUITARY GLAND	HEMORRHAGE	+	ADENOMA			
			THYROID GLANDS			C-CELL ADENOMA (UNILATERAL)			
			ADRENAL GLANDS			VACUOLAR DEGENERATION OF CORTICAL CELLS (UNILATERAL)	+		
			BRAIN			PIGMENTATION	+		

PRESENT		
NOT	느	1
7	+ > SLIGH	2
		•
GRADE		
5		

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE ITED ++ / MODERATE +++ / SEVERE

APPENDIX 11-M4-0316

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

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ANIMAL F NUMBER	1) FATE DA	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
0316	, Y	! ! !	HEART				 	ISLET-CELL ADENOMA
			THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	: PANCREAS FIBROMA: SKIN (SUBCUTIS) LEYDIG CELL TUMOR: TFSTES
			LYMPH NODES (PULM.HILUS)		ш	BLOOD ABSORPTION	+ +	
			SPLEEN		I II II	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS ENLARGEMENT OF FOLLICLE	+ + +	
		=	NASAL CAVITY		H	INFILTRATION OF LEUCOCYTES	+	•
			LUNG			CALCIFICATION OF VASCULAR WALL	+	
		_	LIVER	NODULE	+	FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS	+++++	
		ш.	PANCREAS	NODULE	+ +	ISLET-CELL ADENOMA . ATROPHY OF PANCREATIC ACINUS	+ +	
		×	KIDNEYS		U	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	
			TESTES	ATROPHY CUNILATERAL)	+	LEYDIG CELL TUMOR (BILATERAL)		

1) FATE: Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

3) GRADE OF MASS:

CONTINUED 11-M4-0316 APPENDIX

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. CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

; t t t	1 1 1 2 2 2 3 4 4 1 1	1		1				STUDY NO. 83004
ANIMAL 10 NUMBER FATE	1	1) 4) FATE DAYS	ORGAN	PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHO	GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0316	>-	734	TESTES		+ + +		1 1 1 1 1 1 1 1 1 1 1	
				NODULE (BILATERAL)	+++			
			PROSTATIC GLAND			INFLAMMATION	+	
			SEMINAL VESICLE	АТВОРНУ	+++	АТВОРНУ	+ + +	
			SKIN (SUBCUTIS)	MASS	υ	FIBROMA		
			HARDERIAN GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
			BRAIN		•••	PIGMENTATION	+	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

! ! ! ! ! ! ! !			1 1 1 1		1 1 1 1 1	STUDY NO. 83004
ANIMAL 1) 4) NUMBER	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	TOPATHOL	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0317 Y 734	HEART			FIBROSIS	 	THOMAS WINS CALL
	THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	LEYDIG CELL TUMOR: TESTES
	SPLEEN	ENLARGEMENT	+	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	.+ +	
	BONE MARROW			OSTEOGENESIS	+	
	NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
	LUNG			CALCIFICATION OF VASCULAR WALL	+	
	LIVER			FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA ANGIECTASIA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES		
	KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
	TESTES	NODULE (BILATERAL)	++++	LEYDIG CELL TUMOR (BILATERAL)		
	PROSTATIC GLAND			⋖	+	
1) FATE : Y .	KILLED ON SCHEDULE	2) GRADE	: NEGATIVE NOT	PRESENTED 3) GRA	OF MASS:	
4) DAYS : AFT	AFTER START OF TREATMENT				SMALL AND/OR MEDIAL AND/OR LARGE AND/OR	SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

CONTINUED 11-M4-0317 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

STUDY NO. 83004	PROBABLE CAUSE OF DEATH OR MAJOR	PAIHOLOGICAL FINDINGS				
1	2) GRADE			+	+	
	HISTOPATHOLOGICAL FINDINGS	PAIMOLOGICAL FINDINGS		HYPERPLASIA OF MUCOSAL EPITHELIUM	АТКОРНҮ	LIPOMA
1	2)3) GRADE	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			+ + +	U
	GROSS PATHOLOGICAL FINDINGS				ATROPHY	MASS
	ORGAN		PROSTATIC GLAND		SEMINAL VESICLE	SKIN (SUBCUTIS) MASS
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1) 4) FATE DAYS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	734			•
† † † †	1) FATE	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	>-			

ANIMAL NUMBER

0317

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE 1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

APPENDIX 11-M4-0318

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

1 1 1 1 1 1 1 1					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUDY NO. 83004
ANIMAL F NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0318	3	610	MULTIPLE ORGANS	DISCOLORATION YELLOWISH CHANGE	+ +			ERIT
			ABDOMINAL CAVITY ASCITES (BLOODY	ASCITES (BLOODY)	+ + +			LEIDIG CELL IUMOR: TESTES
			PERITONEUM	NODULE	+ +	MESOTHELIOMA		
			HEART			FIBROSIS	+	٠.
			THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
			LYMPH NODES (PULM.HILUS)			BLOOD ABSORPTION	+	
			SPLEEN	ENLARGEMENT	+ +	EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
			BONE MARROW			ACTIVATION OF HEMATOPOIESIS	‡	
			LUNG			ANEMIA CALCIFICATION OF VASCULAR WALL	+ +	
			LIVER	YELLOWISH CHANGE	+ + +	GRAT	++	
						IN FERIVASCULAK AKEA EXTRAMEDULLARY HEMATOPOIESIS WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + +	,
			PANCREAS				+	
; ; ; ; ; ;	! ! !	! ! ! !	KIDNEYS				+	
1) FI	FATE : DAYS :	W / AFTE	KILLED <u>IN EXTREMIS</u> R START OF TREATMENT	2) GRADE :	NEGATIVE N + SLIGHT ++ MODERA	ATIVE NOT PRESENTED 3) GRADE SLIGHT A '	E OF MASS : SMALL AND/OR MEDIAL AND/OF	OR SPORADIC
					`		LARGE AND/	LARGE AND/OR MULTIPLE

CONTINUED 11-M4-0318 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

		! ! !							STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS	1) ATE	4) DAYS	ORGAN		GROSS PATHOLOGICAL FINDINGS	L 2)3)	HISTOPATHOLOGICAL FINDINGS		2) PROBABLE CAUSE
1	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1		GRADE	OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
8150	3	710					1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	ŀ
		0	2 L U N L U		•	•	GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES	+ + +	
			() ()				(BILAIERAL)		
					NODULE (UNILATERAL)	+ +	LEYDIG CELL TUMOR (UNILATERAL) ATROPHY (UNILATERAL)	+ + +	
			ADRENAL GLANDS	LANDS				• •	
				1			VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	+	

1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

3) GRADE OF MASS:

11-M4-0319 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	; ; ; ;			1			STUDY NO. 83004
ANIMAL 1) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0319 X	206	HEART			FIBROSIS	+ +	ADENOMA: PITUITARY GLAND
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
		SPLEEN	ENLARGEMENT	+	HEMOSIDEROSIS	+	
		BONE MARROW			OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LUNG	CONGESTION	• +	CONGESTIVE EDEMA	+	
		LIVER			FATTY DEGENERATION OF HEPATIC C SMALL GRANULOMA FOCAL ATROPHY OF HEPATIC CELLS ANGIECTASIA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	CELLS + + + + + + + + + + + + + + + + + +	
		PANCREAS			ATROPHY OF PANCREATIC ACINUS	+ +	
		KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
		TESTES		+ + +	ATROPHY (BILATERAL)	+ +	
1) FATE	ļ	FOUND DEAD	2) GRADE	NEGA:	NOT PRESENTED 3)	GRADE OF MASS A SMALL AN B MEDIAL A	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC
4) DAYS	••	AFTER START OF TREATMENT		+++ SEV	SEVERE C	/ LARGE AN	D/OR MULTIPLE

CONTINUED 11-M4-0319 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX:

1 1 1 1 1 1 1 1 1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			1			STUDY NO. 83004
ANIMAL 1) 4)	1)	4) ORGAN	GROSS PATHOLOGICAL	2)3)	HISTOPATHOLOGICAL	: : : : :	
NUMBER.	I E DA	, k	FINDINGS	GRADE	FINDINGS	GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
1 1 1 1 1 1 1 1	! ! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- raihulugical Findings
0319	X 706	6 TESTES					
					HYPERPLASIA OF LEYDIG CELLS (UNILATERAL)	+	
		PROSTATIC GLAND			HYPERPLASIA OF MUCOSAL EPITHELIUM	+	
		SEMINAL VESICLE			АТКОРНУ	+	
		PITUITARY GLAND	MASS	Ą	ADENOMA		
		ADRENAL GLANDS			VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	+	
		MAMMARY GLAND		_	DILATATION OF GLAND	+	
		BRAIN	IMPRESSION	++++	DILATATION OF CEREBRAL VENTRICLE	+	

1) FATE : X , FOUND DEAD

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

> NUMBER ANIMAL

0320

1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
>-	734	HEART			FIBROSIS	; ; ; ; ; ; ; ; ;	ISLET-CELL ADFNOMA
		THYMUS		Ι	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	: PANCREAS LEYDIG CELL TUMOR: TESTES
		LYMPH NODES (PULM.HILUS)		8	BLOOD ABSORPTION	+	
		SPLEEN		χW	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
		NASAL CAVITY		I	INFILTRATION OF LEUCOCYTES	+	
		LARYNGOPHARYNX		ပ	CYSTIC DILATATION OF GLAND	+	
		LUNG		ပ	CALCIFICATION OF VASCULAR WALL	+	
		LIVER		T N T	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS	+++++	
				ī	INFILTRATION OF LEUCOCYTES	+	
		PANCREAS		I	ISLET-CELL ADENOMA ATROPHY OF PANCREATIC ACINUS	+	
		KIDNEYS		5 2	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	

4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED

+ / SLIGHT ++ / MODERATE +++ / SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

CONTINUED 11-M4-0320 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

	1						STUDY NO. 83004
ANIMAL 1) NUMBEE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL	2)	PROBABLE CAUSE
	1			! ! ! ! !		GRADE	OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0320 Y 7	734 k	KIDNEYS				 	
					INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
	<u> </u>	TESTES	ATROPHY (UNILATERAL)	+	LEYDIG CELL TUMOR (BILATERAL)		
			ENLARGEMENT (INTI ATERAL)	+			
			NODULE (BILATERAL)	+ + +			
	S	SEMINAL VESICLE	АТВОРНУ	+	АТКОРНҮ	+	
	-	THYROID GLANDS			HYPERPLASIA OF C-CELLS (UNILATERA!) +	+	
	A	ADRENAL GLANDS		_	HYPERPLASIA OF MEDULLARY CELLS (UNILATERAL)	· +	

1) FATE : Y , KILLED ON SCHEDULE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

4) DAYS : AFTER START OF TREATMENT

APPENDIX 11-M4-0321

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER, RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

	1	!			: : : : :		 	STUDY NO. 83004
ANIMAL F NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0321	3	711	HEART			FIBROSIS	+	ADENOMA: PITUITARY GLAND
			THYMUS		<u></u>	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	*	
			LYMPH NODES (PULM.HILUS)		ш	BLOOD ABSORPTION	+	
			SPLEEN		ıω	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + + +	
			LUNG		A O	ADENOMATOSIS CALCIFICATION OF VASCULAR WALL	+ + +	
			LIVER	YELLOWISH CHANGE	+ +	FATTY DEGENERATION OF HEPATIC CELLS GRANULATION SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSÎS INFILTRATION OF LEUCOCYTES	φ + + + + + +	
			KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	* * + *	
•			TESTES	ATROPHY (B <u>I</u> LATERAL)	+++ H	ATROPHY (BILATERAL) HYPERPLASIA OF LEYDIG CELLS (UNILATERAL)	+ + +	
	,		SEMINAL VESICLE		A	АТВОРНҮ	+	
1) FATE	1	1	W , KILLED IN EXTREMIS AFTER START OF TREATMENT	2) GRADE :	NEGATIVE + SLIGH ++ MODEF ++ SEVEF	NOT PRESENTED 3) GRADE ATE RATE C.	OF MASS: SMALL AND/OR MEDIAL AND/OR	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC
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CONTINUED	
11-M4-0321	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

STUDY NO. 83004	PROBABLE CAUSE OF DEATH OR MAJOR	PATHOLOGICAL FINDINGS			
STUDY NO.	2) GRADE	. !		ILATERAL) +	+
	HISTOPATHOLOGICAL FINDINGS		ADENOMA	HYPERPLASIA OF C-CELLS (UNILATERAL) +	PIGMENTATION
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2)3) GRADE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+ + + + + +		+
!	GROSS PATHOLOGICAL FINDINGS		ENL ARGEMENT HEMORRHAGE		IMPRESSION
	ORGAN		PITUITARY GLAND	THYROID GLANDS	BRAIN
1	4) DAYS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	W 711		
1 1 1	1) FATE	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	3		
1 1 1 1 1 1 1 1 1	ANIMAL 1) 4) FATE DAYS NUMBER		0321		

1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED

+ SLIGHT ++ MODERATE +++ SEVERE

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

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APPENDIX 11-M4-0322

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	# 			! ! ! !		; ; ; ; ;	STUDY NO. 83004
ANIMAL FA	1) 4) FATE DAYS	S ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	. HISTOPATHOLOGICAL FINDINGS	2) GRADE	OBABLE EATH OR OGICAL
0322	W 588	MULTIPLE ORGANS		1 1 1 1 1	MONONUCLEAR CELL LEUKEMIA	: ! ! ! !	1
		HEART			FIBROSIS	++	: MULTIPLE ORGANS
		SPLEEN	ENLARGEMENT ROUGHNESS OF SURFACE	+ + + +	RUPTURE	++	·
		BONE MARROW			OSTEOGENESIS	. +	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LUNG	NODULE	+ +	CALCIFICATION OF VASCULAR WALL	+	
		LIVER	ENLARGEMENT ROUGHNESS OF SURFACE	+ + +	FATTY DEGENERATION OF HEPATIC CELLS	+++ S.	
		PANCREAS			ATROPHY OF PANCREATIC ACINUS FAT INFILTRATION	+ + + + +	
		KIDNEYS			PIGMENTATION (BILATERAL)	++	
		ADRENAL GLANDS			VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	+ +	
		MAMMARY GLAND			DILATATION OF GLAND	+	
		HARDERIAN GLANDS			HYPERSECRETION (BILATERAL)	+	
		BRAIN			HEMORRHAGE	+ +	
1) FATE 4) DAYS		W X KILLED IN EXTREMIS AFTER START OF TREATMENT	2) GRADE :	1 B H + + +	NOT PRESENTED 3) GRADE A A A A A A A A A A A A A A A A A A A	OF MASS: SMALL AND/OR	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC
				`	v	LARGE AND/	/OR MULTIPLE

11-M4-0323 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

	! ! !			 			STUDY NO. 83004
ANIMAL 1) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0323 W 6	687	НЕАКТ			FIBROSIS		LEYDIG CELL TUMOR: TESTES
		LYMPH NODES			BLOOD ABSORPTION	+	
		SPLEEN	NODULE	+	PROLIFERATION OF RETICULAR CE HEMOSIDEROSIS	CELLS ++	
		BONE MARROW			OSTEOGENESIS	+	
		LUNG			CALCIFICATION OF VASCULAR WALL	-L +	
		LIVER			FATTY DEGENERATION OF HEPATIC FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	CELLS + + + + + + + + + + + + + + + + + +	
		PANCREAS			ATROPHY OF PANCREATIC ACINUS	+	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	RAL) + + + +	
		TESTES	NODULE (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
		SEMINAL VESICLE			ATROPHY	+	
1	! ! !	PITUITARY GLAND	ENLARGEMENT	+	HEMORRHAGE	+	
1) FATE: 4) DAYS:		I N O F	1 <u>1S</u> 2) GRADE MENT	EGA .	PRESENTED 3)	GRADE OF MASS: A . SMALL AND/OR S: B . MEDIAL AND/OR W	SS: AND/OR SINGULAR AND/OR SPORADIC AND/OR MULTIPLE

CONTINUED 11-M4-0323 APPENDIX

CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

SIUDY NO. 83004		PROBABLE CAUSE OF DEATH OR MAJOR	PATHOLOGICAL FINDINGS				
	ć	GRADE	1			+ +	+ +
	HISTOPATHOLOGICAL	FINDINGS	PATHOLOGICAL FINDINGS			DERMATITIS	PIGMENTATION HEMORRHAGE
	2)3)	GRADE	1 1 1 1 1 1 1 1 1		+	÷ ÷	
	GROSS PATHOLOGICAL	FINDINGS			REDDISH CHANGE	SCAB	
	ORGAN			W 687 PITUITARY GLAND		SKIN	BRAIN
1 1 1 1	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0 4 0	1 1 1 1 1	687			
! ! ! !	10	ц - -	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	3			
	ANIMAL 1) 4)	NUMBER	1 1 1 1	0323			

1) FATE : W . KILLED IN EXTREMIS

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

11-M4-0324 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 	! ! ! !			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	
0324	×	344	PLEURA	MASS	ပ	ROUS HISTIOCYTOMA,		MALIGNANT FIBROUS HISTIO- CYTOMA: PLEURA
			HEART	DISCOLORATION	+			
			LYMPH NODES			BLOOD ABSORPTION	+	
			SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
			BONE MARROW			ACTIVATION OF HEMATOPOIESIS	+ +	
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES .	+ + +	
			LARYNGOPHARYNX			HEMORRHAGE	+ +	
			rung	MASS	¥	MALIGNANT FIBROUS HISTIOCYTOMA. METASTASIS		
			LIVER	YELLOWISH 'CHANGE	. +	FATTY DEGENERATION OF HEPATIC CELLS CONGESTION FOCAL NECROSIS PROLIFERATION OF BILE DUCT	\$\\ \dots + + + + \\ \dots \\	
			URINARY BLADDER			HYPERPLASIA OF MUCOSAL EPITHELIUM HEMORRHAGE	+ +	
			EYE BALLS	GRAYISH CHANGE (UNILATERAL)	+	CATARACT (UNILATERAL)	+ + +	
	! ! !	1						

4) DAYS : AFTER START OF TREATMENT

1) FATE : X , FOUND DEAD

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : W , KILLED IN EXTREMIS

APPENDIX 11-M4-0325

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

STUDY NO. 83004

ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0325	3	769	MULTIPLE ORGANS			ONUCLEAR CELL LEUKE		EUKEMI
			HEART			FIBROSIS	+	: MULTIPLE ORGANS LEYDIG CELL TUMOR: TESTES
			THYMUS	·		HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
			SPLEEN	E N L A R G E M E N T	+ + +	CONGESTION NECROSIS	+ +	
			BONE MARROW			OSTEOGENESIS	+	
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
			LUNG	REDDISH CHANGE NODULE	+ +	HEMORRHAGE	÷ ÷	
			LIVER			FATTY DEGENERATION OF HEPATIC CELLS FOCAL NECROSIS PROLIFERATION OF BILE DUCT	÷ + + ÷ + +	
			KIDNEYS	WHITISH PATCH (BILATERAL)	+ +	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	
			TESTES	NODULE (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
			SEMINAL VESICLE	АТКОРНУ	+	АТВОРНҮ	+	
			ADRENAL GLANDS			VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	+	

CONTINUED
11-M4-0325
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

						3,007 NO. 83004		SIUUY NU. 83004
ANIMAL 19 4)	1)	4)	ORGAN	GROSS PATHOLOGICAL	1216			
r A Number	FAIE DAYS	s X S		FINDINGS	GRADE	FINDINGS	2) GRADF	PROBABLE CAUSE
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1	1 1 1 1				PATHOLOGICAL FINDINGS	1	PATHOLOGICAL FINDINGS
0325	W 694 BRAIN	9 7,	RAIN		H	HEMORRHAGE		

2) GRADE: NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : W . KILLED IN EXTREMIS

11-M4-0326 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

	1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		; ; ; ; ; ; ; ;	1 1 1 1	
ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2 GRADE	2) (DE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0326 Y	734	PERITONEUM		H	INFLAMMATION	+ 		LEYDIG CELL TUMOR: TESTES
		HEART		π. Σ	FIBROSIS MIGRATION OF HEMOSIDERIN-LADEN CELLS	++ LADEN +		
		THYMUS		Ξ	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+		
		SPLEEN		ΣШ	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESI	+ + \$1\$		
		BONE MARROW		0	OSTEOGENESIS	+		
		NASAL CAVITY		Ħ	INFILTRATION OF LEUCOCYTES	++		
		LUNG		J.	CALCIFICATION OF VASCULAR WALL	WALL +		
		SUBLINGUAL GLANDS		I	INFILTRATION OF LEUCOCYTES (UNILATERAL)	+		
		LIVER		T 20 T 3 T 1	FATTY DEGENERATION OF HEPA SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES HYPERPLASTIC NODULE	HEPATIC CELLS + DUCT + YTES +		
		KIDNEYS		5	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BIL	(BILATERAL)		
1) FATE : 4) DAYS :		Y X KILLED ON SCHEDULE AFTER START OF TREATMENT	2> GRADE :	NEGATIVE + SLIGH ++ MODEF ++ SEVEF	NOT PRESENTED AT AATE	3) GRADE OF M A SMALL B MEDIA C LARGE	MASS: L AND/OF AL AND/OF	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

CONTINUED
11-M4-0326
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

	1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUDY NO. 83004
ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	CAL 2)3) HISTOPATHOLOGICAL GS GRADE FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0326 Y	734	KIDNEYS					
					PIGMENIALIUN (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ +	
		TESTES	NODULE (BILATERAL) MASS (UNILATERAL)	+ + + @	LEYDIG CELL TUMOR (BILATERAL)		
		PROSTATIC GLAND			INFLAMMATION	+	
		SEMINAL VESICLE	АТВОРНҮ	+ + +	АТВОРНУ	+++	
		HARDERIAN GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE 1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

11-M4-0327 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!						
ANIMAL 1) FATE NUMBER	1) 4) TE DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0327	γ 734	HEART			FIBROSIS	+	
		THYMUS		_	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	LEYDIG CELL TUMOR: TESTES
		LYMPH NODES (PULM, HILLIS)			BLOOD ABSORPTION	+	
		SPLEEN		- W	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
		BONE MARROW		J	OSTEOGENESIS	+	
		NASAL CAVITY		1	INFILTRATION OF LEUCOCYTES	. +	
		rnng	NODULE	+	PAPILLARY ADENOMA CALCIFICATION OF VASCULAR WALL	+	
		LIVER		R S A I	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA ANGIECTASIA INFILTRATION OF LEUCOCYTES	ر + + + +	
		PANCREAS	NODULE	+			
		KIDNEYS		O H	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ +	
1 1 1 1 1 1		TESTES	^	+	EYDIG CELL TUMOR (BILATERAL)		
		KILLED ON SCHEDULE	ULE 2) GRADE	N H H H H H H H H H H H H H H H H H H H	PRESENTED 3) GRADE A	OF MASS: SMALL AND/OR SMEDIAL AND/OR	: : /OR SINGULAR D/OR SPORADIC
4) DAYS	••	AFTER START OF TREATMENT	TMENT	+++ SEVERE	•	LARGE AND	LARGE AND/OR MULTIPLE

CONTINUED 11-M4-0327 APPENDIX

CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

SIUDY NO. 83004		OF DEATH OR MAJOR	- FAIHULUGICAL FINDINGS	•						
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(2	GRADE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			++	(AL) +	+		+
	HISTOPATHOLOGICAL	FINDINGS				АТКОРНҮ	HYPERPLASIA OF C-CELLS (UNILATERAL) +	INFILTRATION OF LEUCOCYTES	CONTERAL	PIGMENTATION
	2)3)	GRADE			+ + +	++++		I		Δ.
	GROSS PATHOLOGICAL	FINDINGS	***************************************		NODULE (BILATERAL)	АТВОРНУ				
	ORGAN			TESTES		SEMINAL VESICLE	THYROID GLANDS	HARDERIAN GLANDS		BRAIN
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	ANIMAL 1) 4)	2	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	734						
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1)		! ! !	>-						
; ; ; ;	ANIMAL	NUMBER		0327						

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS:

11-M4-0328 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			1		1 1 1 1	STUDY NO. 83004
ANIMAL 10 RUMBER FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0328 Y	734	HEART			FIBROSIS	+	LEYDIG CELL TUMOR: TESTES
		THYMUS	ENLARGEMENT	+	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	PAPILLARY ADENOMA: LUNG
		LYMPH NODES			BLOOD ABSORPTION	+	
		SPLEEN	NODULE	+	CONGESTION HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS PROLIFERATION OF RETICULAR CELLS	+ + + +	
		BONE MARROW			OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		rung			PAPILLARY ADENOMA CALCIFICATION OF VASCULAR WALL	+	
		LIVER			FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + 0	
		PANCREAS			ATROPHY OF PANCREATIC ACINUS	+ +	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+ +	

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE 4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

CONTINUED
11-M4-0328
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1	1 1 1	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;					STUDY NO. 83004
ANIMAL NUMBER	ANIMAL 1) 4) FATE DAYS NUMBER	4) DAYS	ORGAN	OGICAL	~ 0	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0328	>-	734	734 KIDNEYS			,	 	
						PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
			TESTES	NODULE (BILATERAL)	++++	LEYDIG CELL TUMOR (BILATERAL)		
			PROSTATIC GLAND			INFLAMMATION	+	
			SEMINAL VESICLE	ATROPHY	+	АТКОРНҮ	+ +	
			BRAIN			PIGMENTATION	+	

2) GRADE : NEGATIVE NOT PRESENTED + / SLIGHT ++ / MODERATE +++ / SEVERE 1) FATE : Y . KILLED ON SCHEDULE 2) GF

4) DAYS : AFTER START OF TREATMENT

£

APPENDIX 11-M4-0329

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

	1 1 1 1 1 1 1 1 1			1		: : : :	STUDY NO. 83004
ANIMAL 1) NUMBER	E DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDIN	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0329 W	713	MULTIPLE ORGANS			MONONUCLEAR CELL LEUKEMIA	: ! ! ! !	NOW NOW NOW NOW NOW NOW NOW NOW NOW NOW
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	C-CELL ADENOMA: THYROID
		LYMPH NODES	ENLARGEMENT	+ +			ADENOMA: PITUITARY GLAND
		LYMPH NODES	ENLARGEMENT	+ + +			בנילים כברר יסייסאי ובטות
		SPLEEN	ENLARGEMENT	+ + +	HEMOSIDEROSIS	+	
		BONE MARROW			OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LUNG	REDDISH CHANGE	+ + +	E D E M A H E M O R R H A G E	+ + + +	
		LIVER	ENLARGEMENT	+ + +	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS	+ + + *	
		PANCREAS			ATROPHY OF PANCREATIC ACINUS	+	
		KIDNEYS			er ()	+ ++	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1	TESTES		+ +	LEYDIG CELL TUMOR (UNILATERAL)		
1) FATE 4) DAYS	E : W . KI S : AFTER	KILLED IN EXTREMIS ER START OF TREATMENT	2) GRADE :	: NEGATIVE NOT + SLIGHT ++ MODERATE +++ SEVERE	PRESENTED 3) GRADE A C	OF MASS SMALL AND	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC
						AND BE AND	JOR BULLFIE

CONTINUED
11-M4-0329
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

1 1 1 1 1 1	. !	1			; ; ; ; ;			STUDY NO. 83004
ANIMAL FA NUMBER	1) 4) FATE DAYS	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0326	7	713	TESTES	(BILATERAL)	1.	YPERPLASTA OF 1	; ; ; ; ; ; ; ;	
					•	(UNILATERAL)	-	
			PROSTATIC GLAND		I	INFLAMMATION	+	
			SEMINAL VESICLE		A	АТRОРНҮ	+	
			PITUITARY GLAND		4	ADENOMA		
			THYROID GLANDS		3	C-CELL ADENOMA (UNILATERAL)		
			ADRENAL GLANDS		π	HYPERPLASIA OF CORTIC CELLS	+	
					>	VACUOLAR DEGENERATION OF CORTICAL CELLS (BILATERAL)	+	
			BRAIN		Δ.	PIGMENTATION	+	

4) DAYS : AFTER START OF TREATMENT

1) FATE : W . KILLED IN EXTREMIS

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

11-M4-0330 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

STUDY NO. 83004

ANIMAL 1) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0330 Y	734	HEART			FIBROSIS	+	
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	ADENOMA: PIUUIARY GLAND LEYDIG CELL TUMOR: TESTES
		LYMPH NODES			BLOOD ABSORPTION	+	
		(PULM.HILUS) SPLEEN	ENLARGEMENT IMPRESSION	+ + +	CONGESTION EXTRAMEDULLARY HEMATOPOIESIS FIBROSIS	+ + +	
		BONE MARROW			OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+ +	
		LARYNGOPHARYNX			INFLAMMATION	+	
		רחאפ	NODULE	++	PAPILLARY ADENOMA CALCIFICATION OF VASCULAR WALL	+	
		LIVER	ENLARGEMENT YELLOWISH CHANGE	+ + + +	FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS ANGIECTASIA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + + + ×	
		PANCREAS			ATROPHY OF PANCREATIC ACINUS	+ +	
		KIDNEYS			ONIC PROGRESSIVE OMERULONEPHROPATHY (BILATERAL)		
1) FATE	-	ILLED	2) GRADE	E G A	PRESENTED 3) GRADE	S OF MASS : SMALL AND/OR MEDIAL AND/OR	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC
4) DAYS	S : AFTER	TER START OF TREATMENT		+++ SEVERE	٧	LAKGE AN	D/OK MULIIPLE

CONTINUED 11-M4-0330 APPENDIX

CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1	1 1 1			1			STUDY NO. 83004
ANIMAL 1) 4) HUMBER FATE DAYS	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0330	>-	734	KIDNEYS		 		! ! ! !	
						INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
			TESTES	ATROPHY (BILATERAL)	+	LEYDIG CELL TUMOR (BILATERAL)		
				NODULE (BILATERAL)	+ + +			
			PROSTATIC GLAND			HYPERPLASIA OF MUCOSAL EPITHELIUM	+	
			PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ +	ADENOMA		
			ADRENAL GLANDS		_	HYPERPLASIA OF MEDULLARY CELLS (UNILATERAL)	+ +	
			BRAIN			PIGMENTATION	+	
			SPINAL CORD	·	<u>u.</u>	PIGMENTATION	+	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + / SLIGHT ++ / MODERATE +++ / SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

11-M4-0331 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

		GROSS PATHOLOGICAL		IN 2 TOO DOUT MODELLY		# 1
FATE DAYS NUMBER	! ! !	FINDINGS	GRADE		GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0331 Y 735	HEART		ш.	FIBROSIS	+	ADENOMA: PITUITARY GLAND
	THYMUS		_	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
	LYMPH NODES		Ш	BLOOD ABSORPTION	+	
	SPLEEN		Σ W	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
	BONE MARROW		0	OSTEOGENESIS	+	
	NASAL CAVITY		I	INFILTRATION OF LEUCOCYTES	+	
	LARYNGOPHARYNX		S	CYSTIC DILATATION OF GLAND	+	
	רחאפ		O	CALCIFICATION OF VASCULAR WALL	+	
	LIVER	NODULE	+ FOAT HI	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA ANGIECTASIA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES HYPERPLASTIC NODULE	++++++	
	PANCREAS		V	ATROPHY OF PANCREATIC ACINUS	++	
	KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+	

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

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CONTINUED
11-M4-0331
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

STUDY NO. 83004	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS						
! ! ! ! !	2) GRADE	1 1 1 1 1 1 1	+.+	+		+	+
	HISTOPATHOLOGICAL FINDINGS		PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	HYPERPLASIA OF LEYDIG CELLS (BILATERAL)	ADENOMA	VACUOLAR DEGENERATION OF CORTICAL CELLS (UNILATERAL)	DILATATION OF GLAND
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2)3) GRADE			+ +	+ +	>	۵
	GROSS PATHOLOGICAL FINDINGS			ATROPHY (BILATERAL) NODULE (BILATERAL)	HEMORRHAGE ENLARGEMENT		
	ORGAN	KIDNEYS		TESTES	PITUITARY GLAND	ADRENAL GLANDS	MAMMARY GLAND
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4) DAYS	735					
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	ANIMAL 1) 4) FATE DAYS NUMBER	> -					
1 1 1 1	ANIMAL	0331					

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

3) GRADE OF -MASS:

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : W . KILLED IN EXTREMIS

APPENDIX 11-M4-0332

CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

CONTINUED	
11-M4-0332	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX : STUDY NO. 83004

PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS	
 2) GRADE	*
OGICAL 2)3) HISTOPATHOLOGICAL 2) PROBABLE CAUSE DINGS GRADE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS	INFILTRATION OF LEUCOCYTES (UNILATERAL)
2)3) GRADE	I
ANIMAL 1) 4) ORGAN GROSS PATHOI FATE DAYS NUMBER	W 659 HARDERIAN GLANDS
1) 4) FATE DAYS	629
ANIMAL 1) 4) FATE DAYS NUMBER	3
ANIMAL	0332

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : W , KILLED IN EXTREMIS

APPENDIX 11-M4-0333

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

	1 1 1					 	STUDY NO. 83004
ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	,2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0333 Y	735	HEART			FIBROSIS	+	ADENOMA: PITUITARY GLAND
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	LEYDIG CELL TUMOR: TESTES
		SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LIVER			FATTY DEGENERATION OF HEPATIC C SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	C E L L S	
		PANCREAS			ATROPHY OF PANCREATIC ACINUS	+	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	÷ ++	
		TESTES	NODULE (BILATERAL)	++++	LEYDIG CELL TUMOR (BILATERAL)		
		PROSTATIC GLAND			INFLAMMATION	+	
		SEMINAL VESICLE	ATROPHY	+++	АТКОРНУ	++	
; ; ; ; ; ; ;	1 1 1 1 1	PITUITARY GLAND					
1) FATE:	. Y	KIL R S	JLE 2) GRADE MENT	12+++	EGATIVE NOT PRESENTED 3) GRADE SLIGHT B A C C C C C SEVERE	DE OF MASS: SMALL AND/OR MEDIAL AND/OR LARGE AND/OR	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULIPLE

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

CONTINUED	
11-M4-0333	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

STUDY NO. 83004

PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS					. 40		
2) GRADE		+					
GICAL INDINGS		PIGMENTATION					
2)3) GRADE							
GROSS PATHOLOGICAL FINDINGS		·					
ORGAN	PITUITARY GLAND	BRAIN					
4) DAYS	735						
1) FATE	>-						
ANIMAL	0333						

APPENDIX 11-M4-0334

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 		1 1 1 1 1 1 1 1	STUDY NO. 83004
ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PAT	PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	OF PATH
0334 X	679	THYMUS			Ξ	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+ + + + + + + + + + + + + + + + + + + +	ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES
		CPULM, HILLIS)			а	BLOOD ABSORPTION	+	
		SPLEEN			Ι	HEMOSIDEROSIS	+ +	
		BONE MARROW			0	OSTEOGENESIS	+	
		NASAL CAVITY			ī	INFILTRATION OF LEUCOCYTES	+	
		LUNG	CYST		73 +	CALCIFICATION OF VASCULAR WALL	+ + 171	
		LIVER				FATTY DEGENERATION OF HEPATIC GRANULATION PROLIFERATION OF BILE DUCT WITH FIBROSIS	+ + + + CELLS	
		PANCREAS			I	INFILTRATION OF LEUCOCYTES	+	
		KIDNEYS			C. C.	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	ERAL) +	
		TESTES			LE	LEYDIG CELL TUMOR (BILATERAL)	^	
		PROSTATIC GLAND			Z H	INFLAMMATION	+	
		SEMINAL VESICLE	ATROPHY		+ AT	АТВОРНУ	+	
! ! ! ! ! ! !	; ; ; ;	PITUITARY GLAND	HEMORRHAGE		+			
FATE		FOUND DEAD		2) GRADE:	EGATIV SLI MOD	E NOT PRESENTED 3) GHT	GRADE OF MASS:	: : D/OR SINGULAR ND/OR SPORADIC
		. AFIEK STAKT OF TREATMENT	- MEN I	+	+++ SEVERE	ñ	LARGE	AND/OR MULTIPLE

CONTINUED 11-M4-0334 APPENDIX

CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUDY NO. 83004	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS G	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
			!		d :	PATHOLOGICAL FINDINGS
0334 X 649	X 649 PITUITARY GLAND	ENLARGEMENT	+ + +			
	ADRENAL GLANDS		> -	VACUOLAR DEGENERATION OF CORTICAL CELLS (UNILATERAL)	+	
	BRAIN		۵	DILATATION OF CEREBRAL VENTRICIF	- 1 - 1	

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 2) GRADE : NEGATIVE NOT PRESENTED
+ / SLIGHT
++ / MODERATE
+++ / SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : X , FOUND DEAD

11-M4-0335 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) NUMBER	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	S	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0335 Y 735	HEART			FIBROSIS	++	LEYDIG CFIT THMOB. TESTES
	THYMUS		x	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
	LYMPH NODES (PULM.HILUS)		æ	BLOOD ABSORPTION	+	
	SPLEEN		Ξ	HEMOSIDEROSIS	+	
	BONE MARROW		Ö	OSTEOGENESIS	+	
	NASAL CAVITY		II	INFILTRATION OF LEUCOCYTES	+	
	Lung		73	CALCIFICATION OF VASCULAR WALL	+	
	LIVER		T N T H	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES HYPERPLASTIC NODULE	+++ ++	
	PANCREAS		AT	ATROPHY OF PANCREATIC ACINUS	+ + - +	
	KIDNEYS		CH G P1	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	
	TESTES	ENLARGEMENT +	+ + +	LEYDIG CELL TUMOR (BILATERAL)		

1) FATE: Y XILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ ', SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

CONTINUED 11-M4-0335 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUDY NO. 83004
ANIMAL 1) 4) HUMBER) 4) E DAYS	ORGAN	GROSS PATHOLO FIND	2)3) GRADE		2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
V 3355 Y	735	TESTES			! ! ! ! !	1 1 1 1 1 1 1 1 1	
			NODULE (BILATERAL)	+ + +			
		PROSTATIC GLAND		I	INFLAMMATION	+	
		SEMINAL VESICLE	АТВОРНҮ	+++ +	АТКОРНҮ	++	
		ADRENAL GLANDS		,	VACUOLAR DEGENERATION OF CORTICAL CELLS (UNILATERAL)	+	
		BRAIN		ū	PIGMENTATION	+	

4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

APPENDIX 11-M4-0336

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY

INDIVIDUAL PATHOLOGICAL FINDINGS

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		 	STUDY NO. 83004
ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0336 Y	735	HEART		: : : : : :	FIBROSIS	+	FIRROMA
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	· +	LEYDIG CELL TUMOR: TESTES
		SPLEEN			CONGESTION HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ + +	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LUNG		-	CALCIFICATION OF VASCULAR WALL	+	
		LIVER	*		FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + +	
		PANCREAS		1	ATROPHY OF PANCREATIC ACINUS	+	
		KIDNEYS		O 11	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	* · *	
		TESTES	NODULE (BILATERAL)	7 +++	LEYDIG CELL TUMOR (BILATERAL)		
		PROSTATIC GLAND		I	INFLAMMATION	+	
		SEMINAL VESICLE	АТВОРНУ	+++	АТВОРНУ	+	

CONTINUED	
11-M4-0336	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM STUDY NO. 83004

 	 	SDNIC	1 1 1 1 1	
	PROBABLE CAUSE OF DEATH OR MAJOR	PATHOLOGICAL FINDINGS		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2) GRADE		-	
	HISTOPATHOLOGICAL FINDINGS	PATHOLOGICAL FINDINGS		FIBROMA
	2)3) GRADE			FI
1				8
	GROSS PATHOLOGICAL FINDINGS	иимвер		MASS
	ORGAN			Y 735 SKIN (SUBCUTIS) MASS
	4.) AYS			35 SF
1	1) 4) FATE DAYS	1		٧ ٧
	ANIMAL 1) 4) FATE DAYS	NUMBER		0336

2) GRADE : NEGATIVE NOT PRESENTED

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

+ / SLIGHT ++ / MODERATE +++ / SEVERE

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

3) GRADE OF MASS:

APPENDIX 11-M4-0337

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

	! ! ! !			1			STUDY NO. 83004
ANIMAL 1) NUMBER	DA	4) ORGAN YS	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS		PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
V 7550	735	THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	PAPILLARY ADENOMA: LUNG PHEOCHROMOCYTOMA: ADRENAL
		LYMPH NODES (PULM.HILUS)		_	BLOOD ABSORPTION	+	GLANDS NECROSIS: ADRENAL GLANDS
		SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	ADENOMA: PITUITARY GLAND LEYDIG CELL TUMOR: TESTES
		BONE MARROW		J	OSTEOGENESIS	+	
		NASAL CAVITY		- 7	INFILTRATION OF LEUCOCYTES	+	
		LARYNGOPHARYNX		7	INFILTRATION OF LEUCOCYTES	+	
		LUNG	NODULE	+++	PAPILLARY ADENOMA PHEOCHROMOCYTOMA, METASTASIS CALCIFICATION OF VASCULAR WALL	. +	
		LIVER		TT NT H	FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS	+ + + + +	
		PANCREAS		ď	ATROPHY OF PANCREATIC ACINUS	+	
		KIDNEYS		O	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+ + +	

2) GRADE : NEGATIVE NOT PRESENTED	+ \ SLIGHT	++ / MODERATE	+++ > SEVERE
1) FATE : Y , KILLED ON SCHEDULE			4) DAYS : AFIER START OF TREATMENT

CONTINUED 11-M4-0337 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

	! ! !			1 1 1			STUDY NO. 83004
ANIMAL 1) NUMBER FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
V 7550	735	KIDNEYS					
					PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
		URINARY BLADDER			INFILTRATION OF LEUCOCYTES	+	
		TESTES	NODULE (UNILATERAL)	+ +	LEYDIG CELL TUMOR (BILATERAL)		
		PROSTATIC GLAND	NODULE	+ + +	INFLAMMATION	+ +	
		PITUITARY GLAND	ENLARGEMENT	+ +	ADENOMA		
	٠	THYROID GLANDS			HYPERPLASIA OF C-CELLS (UNILATERAL)	+	
		ADRENAL GLANDS	ENLARGEMENT (UNILATERAL)	+ +	PHEOCHROMOCYTOMA (UNILATERAL), PRIMARY NECROSIS (UNILATERAL)	+ + +	
		MAMMARY GLAND			DILATATION OF GLAND	+	
		BRAIN			PIGMENTATION	+	
		SPINAL CORD			PIGMENTATION	+	

4) DAYS : AFTER START OF TREATMENT

1) FATE: Y KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE

APPENDIX 11-M4-0338

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

STUDY NO. 83004

ANIMAL NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	.2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0338	>-	735	HEART		1 1 1 1 1 1 1 1 1	FIBROSIS	 	C-CELL ADENOMA: THYROID
			THYMUS		_	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	GLANDS LEYDIG CELL TUMOR: TESTES
			SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
			BONE MARROW		C	OSTEOGENESIS	+	
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
			LUNG		O	CALCIFICATION OF VASCULAR WALL	+	
			LIVER		1100	HYPERPLASTIC NODULE FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + +	
			PANCREAS		ď	ATROPHY OF PANCREATIC ACINUS	+	
			KIDNEYS		O LI	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + + + + +	
			TESTES	NODULE (BILATERAL)	++++	LEYDIG CELL TUMOR (BILATERAL)		
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	FATE DAYS	: Y . K!	CLLED ON SCHED	ULE 2) GRADE TMENT	NEGATIVE NOT SLIGHT NODERATE SEVERE	TIVE NOT PRESENTED 3) GRADE SLIGHT A 1 SEVERE	E OF MASS SMALL AW MEDIAL A	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MILITPLE
								1 1

APPENDIX 11-M4-0338 CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

STUDY NO. 83004

ANIMAL F/ NUMBER	1) 4) FATE DAYS	4) ORGAN YS	HOL FIN	2)3) GRADE	0 L O F	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0338	, , , , , , , , , , , , , , , , , , ,	STESTES	ENLARGEMENT (UNILATERAL) SOFTENING (UNILATERAL)	; ; ; ; ; ; ; ; ; ;		t 1 1 1 1 1 1 1 1 1	
		SEMINAL VESICLE	ATROPHY	+	АТКОРНҮ	+	
		THYROID GLANDS	ENLARGEMENT (UNILATERAL)	+ +	C-CELL ADENOMA (UNILATERAL)		
		BRAIN		ш.	PIGMENTATION	+	
						. •	
1) 8	FATE: Y	Y , KILLED ON SCHEDULE	2) GRADE :	NEG.	NOT PRESENTED 3)	GRADE OF MASS: A > SMALL AND/	: : /OR SINGULAR
] (7	4) DAYS : A	: AFTER START OF TREATMENT		++ , MODE +++ , SEVE	MODERATE B . SEVERE C .	MEDIAL AND LARGE AND	MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

2) GRADE: NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : W . KILLED IN EXTREMIS

APPENDIX 11-M4-0339

CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

THYMUS SPLEEN IMPRES BONE MARROW NASAL CAVITY LUNG LIVER YELLOW KIDNEYS		GRADE	FINDINGS	GRADE	OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
RROW AVITY		•	FIBROSIS	+	LEYDIG CELL TUMOR: TESTES
RROW AVITY			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
RROW AVITY	IMPRESSION	+	PROLIFERATION OF RETICULAR CELLS HEMOSIDEROSIS	+ +	
A V I T Y			OSTEOGENESIS	+	
			INFILTRATION OF LEUCOCYTES	+	
			ADENOMATOSIS CALCIFICATION OF VASCULAR WALL	+ +	
PANCREAS KIDNEYS	YELLOWISH CHANGE	· +	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA CHOLANGIOFIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + + •	·
KIDNEYS			ATROPHY OF PANCREATIC ACINUS	+ +	
			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	* + +	
TESTES NODULE	NODULE (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
PROSTATIC GLAND			INFLAMMATION	+	

CONTINUED 11-M4-0339 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	!			 		1 1 1 1 1 1	STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
M 6280	712	SEMINAL VESICLE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	; ; ; ; ; ; ;	ATROPHY	! ! ! ! ! ! ! ! !	
		PITUITARY GLAND	EDEMA	+	CYST HEMORRHAGE	+ + +	
		EYE BALLS	GRAYISH CHANGE (UNILATERAL)	+ + +	CATARACT (UNILATERAL) RETINAL ATROPHY (UNILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ + + + +	
		HARDERIAN GLANDS			INFILTRATION OF LEUCOCYTES (BILATERAL)	+	
		OPTIC NERVE			GLIOSIS (UNILATERAL)	+	

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : W , KILLED IN EXTREMIS

A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 3) GRADE OF MASS:

11-M4-0340 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

			1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS WUMBER	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0340 Y 735	HEART			FIBROSIS	+	PAPILLARY ADENOMA: LUNG
	THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
	LYMPH NODES			BLOOD ABSORPTION	+	
	SPLEEN			HEMOSIDEROSIS	÷ +	
	BONE MARROW			OSTEOGENESIS	+	
	NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
	LUNG	NOĎULE	+	PAPILLARY ADENOMA OSSEOUS TISSUE CALCIFICATION OF VASCULAR WALL	+ +	
	LIVER			FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT INFILTRATION OF LEUCOCYTES HYPERPLASTIC NODULE	+ + + + + +	
	PANCREAS			ATROPHY OF PANCREATIC ACINUS INFILTRATION OF LEUCOCYTES	+ +	
	KIDNEYS		J	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL)	+ +	

2) GRADE : NEGATIVE NOT PRESENTED 4) DAYS : AFTER START OF TREATMENT 1) FATE : Y , KILLED ON SCHEDULE

CONTINUED 11-M4-0340 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

	1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	PAT	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0340 Y	735	KIDNEYS		: : : : : : : :	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
					PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ +	
		TESTES	SOFTENING (UNILATERAL) +		LEYDIG CELL TUMOR (UNILATERAL) HYPERPLASIA OF LEYDIG CELLS (UNILATERAL)	+	
		HARDERIAN GLANDS		ľ	INFILTRATION OF LEUCOCYTES (UNILATERAL)		

1) FATE : Y / KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

11-M4-0341 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

0 0 0 0 0 0 0 1 0 1	! ! ! !			1 1 1 1 1		1	STUDY NO. 83004
ANIMAL 1) NUMBER	DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOL	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0341 Y	735	HEART			FIBROSIS MIGRATION OF HEMOSIDERIN-LADEN CELLS	+ + +	AND
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
		LYMPH NODES			BLOOD ABSORPTION	+	
		SPLEEN			HEMOSIDEROSIS	+	
		BONE MARROW			OSTEOGENESIS	+	•
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		רחאפ	NODULE	+	ADENOMATOSIS CALCIFICATION OF VASCULAR WALL	+ +	
		LIVER			FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + + + · ·	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE: NEGATIVE NOT PRESENTED
+ SLIGHT
++ MODERATE
+++ SEVERE

A . SMALL AND/OR SINGULAR B . MEDIAL AND/OR SPORADIC C . LARGE AND/OR MULTIPLE

3) GRADE OF MASS:

4.

CONTINUED
11-M4-0341
APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	4) AYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
	1			!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!] 	PATHOLOGICAL FINDINGS
0341 Y 73	735	KIDNEYS					
					INFILTRATION OF LEUCOCYTES	+	
				-	CALCIFICATION (UNILATERAL)	+	
	,	TESTES	SOFTENING (BILATERAL) NODULE (BILATERAL)	+++	LEYDIG CELL TUMOR (BILATERAL)		
	-4-	PROSTATIC GLAND			INFLAMMATION	+	
	J)	SEMINAL VESICLE	NODULE	+ + +		-	
	ш	PITUITARY GLAND		ď	ADENOMA		

1) FATE: Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED
+ , SLIGHT
++ , MODERATE
+++ , SEVERE

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

APPENDIX 11-M4-0342

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	 2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0342 Y	736	HEART			FIBROSIS	!	
		THYMUS		±.	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	- - +	רבילות כברר יסשטא: ובאובא
		LYMPH NODES (PULM, HILLIS)		ш	BLOOD ABSORPTION	+	
		SPLEEN		. u	HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
		BONE MARROW		0	OSTEOGENESIS	+	
		NASAL CAVITY		I	INFILTRATION OF LEUCOCYTES	+	
		LUNG		ပ	CALCIFICATION OF VASCULAR WALL	+	
		LIVER	ROUGHNESS OF SURFACE YELLOWISH CHANGE	+ + T O T H	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + +	
		KIDNEYS		O A H	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ ++	
		TESTES	ENLARGEMENT (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		
	1111111						

3) GRADE OF MASS:

CONTINUED 11-M4-0342 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1	PATHOLOGICAL FINDINGS
0342 Y 736	TESTES					
		NODULE (BILATERAL)	+++			
	SEMINAL VESICLE ATROPHY	ATROPHY	+ +	АТКОРНҮ	++	
	PITUITARY GLAND	HEMORRHAGE	+			
	BRAIN			PIGMENTATION	+	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

11-M4-0343 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

PROBABLE OF DEATH O PATHOLOGICAL IEYDIG CELL TUI AMARTOMA: MAMI		1 1 1 1						STUDY NO. 83004
THYMUS	1) FATE	4) DAYS	ORGAN	PATHOLOG FINDI	2)3) GRADE	G	2) GRADE	1 0
THYMUS PRETICULUM CELLS SPLEEN SPLEEN SPLEEN SPLEEN BONE MARROW MASAL CAVITY LUNG LUNG LLIVER STATTY DEGENERATION OF HEMATOPOIESIS LLIVER TATTY DEGENERATION OF HEMATIC CELLS FATTY DEGENERATION OF HEATIC CELLS WITH TIBROIL RANDOM TESTES KIDNEYS CHRONIC PROCESSIS CHRONIC PROCESSIS CHRONIC PROCESSIS TESTES NODULE (BILATERAL) THYTITRATION OF LEUCOCYTES THYMORY BLADDER THYMITTRATION OF LEUCOCYTES THYMORY BLADDER THYMITTRATION OF LEUCOCYTES THYMITTRATION	>-	736	HEART				; ; ; ; ; ; ; ; ; ;	
ENDRE MARROW ACTIVATION OF HEMATOPOIESIS LUNG LUNG LIVER KIDNEYS KIDNEYS KIDNEYS TESTES NODULE (BILATERAL) TESTES NODULE (BILATERAL) THE MARSON OF LEUCOCYTES HAMRITON OF LEUCOCYTES HAM			THYMUS			IYPERPLASIA OF EPITHELIAL RETICULUM CELLS	- +	
BONE MARROW MASAL CAVITY LUNG LUNG LIVER LIVER LIVER KIDNEYS KIDNEYS KIDNEYS RODULE (BILATERAL) FATT DEGENERATION OF HEPATIC CELLS + SMALL GRANULOMA FOR ALTERATION OF HEPATIC CELLS + SMALL GRANULOMA FOR ALTERATION OF HEPATIC CELLS + SMALL GRANULOMA FOR HEPATIC CELLS + SMALL GRANULOMA FOR ALTERATION OF BILE DUCT + FOLTH FORDERS IVE FOLTH FOR ALTERATION OF BILE DUCT + FOLTH FORDER FOLTH FOR ALTERAL) KIDNEYS KIDNEYS KIDNEYS KIDNEYS FATE : Y . KILLED ON SCHEDULE (BILATERAL) +++ LEYDIG CELL TUNOR (BILATERAL) FATE : Y . KILLED ON SCHEDULE			SPLEEN		2.2	IEMOSIDEROSIS :XTRAMEDULLARY HEMATOPOIESIS	+ +	
HAMARTOMA, METASTASIS LUNG LUNG LIVER LIVER LIVER KIDNEYS KIDNEYS KIDNEYS KIDNEYS KIDNEYS KIDNEYS KIDNEYS KIDNEYS CHRONIC PROGRESSIVE FIGURATION OF BILE DUCT WITH FIBROSIS CHRONIC PROGRESSIVE FIGURATION OF BILE DUCT WITH FIBROSIS CHRONIC PROGRESSIVE FIGURATION OF BILE DUCT WITH FIBROSIS CHRONIC PROGRESSIVE FIGURATION OF BILE DUCT WITH FIBROSIS CHRONIC PROGRESSIVE FIRE : Y . XILLED ON SCHEDULE Z) GRADE (BILATERAL) FATE : Y . XILLED ON SCHEDULE Z) GRADE : NEGATIVE NOT PRESENTED A . SEALCH WHOLOR AND YOR WITH AND YOR ** A CHARGE A			BONE MARROW		1	I	+	
HAMMARTOMA, METASTASIS CALCIFICATION OF VASCULAR WALL LIVER KIDNEYS KINNEYS KINNE			NASAL CAVITY		I	NFILTRATION OF LEUCOCYTES	+	
FATTY DEGENERATION OF HEPATIC CELLS + SMALL GRANULDMA FOCAL ATROPHY OF HEPATIC CELLS + FOCAL ATROPHY OF HEPATIC CELLS + FOCAL ATROPHY OF HEPATIC CELLS + WITH FIBROSIS CHRONIC PROGRESSIVE GLOMERULOPHROPATERAL) INFILTRATION OF LEUCOCYTES + FORMENTATION OF LEUCOCYTES + COLMENDATE STATES NODULE (BILATERAL) FATE : Y , KILLED ON SCHEDULE			LUNG		Ξ Ο	AMARTOMA, METASTASIS ALCIFICATION OF VASCULAR WALL		
CHRONIC PROGRESSIVE GLOMERULONE PHROPATHY (BILATERAL) + PIGMENTATION (BILATERAL) + (BILATERAL) + (BILATERAL) + (BILATERAL) + TESTES NODULE (BILATERAL) +++ LEYDIG CELL TUMOR (BILATERAL) FATE: Y . KILLED ON SCHEDULE 2) GRADE: NEGATIVE NOT PRESENTED + SLIGHT + SLIGHT DAYS: AFTER START OF TREATMENT +++ SEVERE C . LARGE AND/OR			LIVER		<u>.</u> О н о	ATTY DEGENERATION OF HEPATIC MALL GRANULOMA OCAL ATROPHY OF HEPATIC CELLS ROLIFERATION OF BILE DUCT WITH FIBROSIS	CELLS	
URINARY BLADDER TESTES NODULE (BILATERAL) +++ LEYDIG CELL TUMOR (BILATERAL) FATE: Y . KILLED ON SCHEDULE T . SLIGHT DAYS: AFTER START OF TREATMENT T . SEVERE INFILTRATION OF LEUCOCYTES ++ LEYDIG CELL TUMOR (BILATERAL) +++ LEYDIG CELL TUMOR (BILATERAL) T . SLIGHT ++ SEVERE C . LARGE AND/OR C . LARGE AND/OR			KIDNEYS			HRONIC PROGRESSIVE SLOMERULONEPHROPATHY (BILATER IGMENTATION (BILATERAL) VFILTRATION OF LEUCOCYTES (BILATERAL)		
TESTES NODULE (BILATERAL) +++ LEYDIG CELL TUMOR (BILATERAL) FATE: Y . KILLED ON SCHEDULE 2) GRADE: NEGATIVE NOT PRESENTED 3) GRADE OF MASS: +		-	URINARY BLADDER		II	VFILTRATION OF LEUCOCYTES	+	
FATE: Y , KILLED ON SCHEDULE 2) GRADE: NEGATIVE NOT PRESENTED 3) GRADE OF MASS: + , SLIGHT + , MODERATE B , MEDIAL AND/OR C , LARGE AND/OR			TESTES	(BILATERA				
DAYS : AFTER START OF TREATMENT ++ , SEVERE C , LARGE AND/OR C , LARGE AND/OR	I A H	, , , , , , , , , , , , , , , , , , ,	0 2	2) GRADE	1	PRESENTED 3)	ADE OF MASS	
	DAYS	AFTEF	START OF				/ SMALL / MEDIAL / LARGE	/OR SINGULAR D/OR SPORADIC /OR MULTIPLE

APPENDIX 11-M4-0343 CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

 	; ; ; ;	! ! ! !	! ! ! ! ! !		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		! ! ! ! ! !	STUDY NO. 83004
ANIMAL 1) 4) NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0343	>-	736	PROSTATIC GLAND			HYPERPLASIA OF MUCOSAL EPITHELIUM INFLAMMATION	+ +	
			SEMINAL VESICLE ATROPHY	АТВОРНУ	+ + +	АТВОРНУ	+	
			MAMMARY GLAND	MASS	Ą	HAMARTOMA, PRIMARY		
			HARDERIAN GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
			BRAIN			PIGMENTATION	+	
			SPINAL CORD			PIGMENTATION	+	

	A , SMALL AND/OR SINGULAR	B / MEDIAL AND/OR SPORADIC	C . LARGE AND/OR MULTIPLE
2) GRADE : NEGATIVE NOT PRESENTED	+ \ SLIGHT	++ / MODERATE	+++ SEVERE
ON SCHEDULE			4) DAYS : AFTER START OF TREATMENT

11-M4-0344 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

ANIMAL F, NUMBER	1) FATE [4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0344	>-	736	HEART			ROSIS	+	LEYDIG CELL TUMOR: TESTES
			THYMUS		• · · · · · · · · · · · · · · · · · · ·	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	FIBROMA: SKIN (SUBCUTIS)
			SPLEEN		-	CONGESTION HEMOSIDEROSIS	+ +	
			LUNG		J	CALCIFICATION OF VASCULAR WALL	+	
			LIVER			FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + + + 0	
			KIDNEYS) I	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	+ ++	
			TESTĘS	SOFTENING (UNILATERAL) ENLARGEMENT (UNILATERAL) NODULE (BILATERAL)	+ + + +	LEYDIG CELL TUMOR (BILATERAL)		
			SEMINAL VESICLE	ATROPHY	++ +	АТКОРНУ	+	
			SKIN (SUBCUTIS)	MASS	A	FIBROMA		
1 1 1	1 H > C		ILLED ON SCHEDU	2) GRADE : + + + + + + + + + + + + + + + + + +	191	ATIVE NOT PRESENTED 3) GRADE SLIGHT A A MODERATE B A CRUSH	OF MASS: SMALL AND/OR S MEDIAL AND/OR MEDIAL AND/OR MEDIAL	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC
Ì								111111111111111111111111111111111111111

CONTINUED 11-M4-0344 APPENDIX CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM STUDY NO. 83004

: : : : : : : : : : : : : : : : : : :	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS		
	PROBA OF DEAT		
 	2) GRADE	RAL) +	+
	ICAL 2)3) HISTOPATHOLOGICAL 2) PROBABLE CAUSE NGS GRADE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS	CALCIFICATION, SCLERA (UNILATERAL) +	PIGMENTATION
	2)3) GRADE	ပ	d.
	GROSS PATHOLOGICAL FINDINGS		
	ORGAN	Y 736 EYE BALLS	BRAIN
	4) DAYS	736	
 	FATE		
1 1 1 1	ANIMAL	0344	

2) GRADE : NEGATIVE NOT PRESENTED

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

+ / SLIGHT ++ / MODERATE +++ / SEVERE

11-M4-0345 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

	1			1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
Y 5450	736	HEART		L.	FIBROSIS	 	LEYDIG CELL TUMOR: TESTES
		THYMUS		Ξ	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
		SPLEEN		x	HEMOSIDEROSIS	+	
		BONE MARROW		0	OSTEOGENESIS	+	
		NASAL CAVITY		I	INFILTRATION OF LEUCOCYTES	+	
		LARYNGOPHARYNX		υ	CYSTIC DILATATION OF GLAND	+	
		LUNG		Ü	CALCIFICATION OF VASCULAR WALL	+	
		LIVER		<u> </u>	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	++++	
		PANCREAS		A	ATROPHY OF PANCREATIC ACINUS	+ +	
		KIDNEYS		CF G	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ +	
		TESTES	ENLARGEMENT (UNILATERAL)	+ +	LEYDIG CELL TUMOR (UNILATERAL)		

4) DAYS : AFTER START OF TREATMENT

1) FATE: Y , KILLED ON SCHEDULE

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

2) GRADE : NEGATIVE NOT PRESENTED

+ / SLIGHT ++ / MODERATE +++ / SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

CONTINUED
11-M4-0345
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS							
2) GRADE		+ + + + +	+				
₩.	ATROPHY (UNILATERAL)	АТКОРНУ	PIGMENTATION				
2)3) GRADE	 + + +	++	u.				
GROSS PATHOLOGICAL FINDINGS	TERAL	АТВОРНУ					
ORGAN	TESTES	SEMINAL VESICLE	BRAIN				
4) DAYS	736						
1) FATE	>						
ANIMAL	0345						

11-M4-0346 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) PROBABLE GRADE OF DEATH OI PATHOLOGICAL	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0346 Y	736	HEART		ti.	FIBROSIS	+ PAPILLARY ADENOMA:	DENOMA: LUNG
		THYMUS		I	HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	LEYDIG CELL TUMOR: +	
		LYMPH NODES		æ	LOOD ABSORPTION	+	
		SPLEEN		I	HEMOSIDEROSIS	+	
		BONE MARROW		0	OSTEOGENESIS	+	
		NASAL CAVITY		I	INFILTRATION OF LEUCOCYTES	++	
		LUNG	NODULE	+	PAPILLARY ADENOMA		
		STOMACH		H	INFILTRATION OF LEUCOCYTES	+	
		LIVER		шоше″ы	FATTY DEGENERATION OF HEPATIC CELLS SMALL GRANULOMA FOCAL ATROPHY OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES		
		KIDNEYS		5 ° 6 Fi	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ + +	
		S	ENLARGEMENT	+ +	EYDIG CELL TUMOR (BILATERAL		
H	¦	LLED ON S	2) GRADE	EGATIVE SLIG MODE	PRESENTED 3) GRADE	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC	
4.) DAYS	. AT LEX	EK SIAKI OF IKEAIMENI		+++ > > E V E	٠ ر	NKGE AND/OK MULIIPL	11

3) GRADE OF MASS:

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + NODERATE + SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

APPENDIX 11-M4-0346 CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

			-					STUDY NO. 83004
ANIMAL 1) 4) AN FATE DAYS	1) FATE	4) DAYS		GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	CAL 2)3) HISTOPATHOLOGICAL 2) GS GRADE FINDINGS GRADE	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0346	>-	736	TESTES		+ + +			
			PROSTATIC GLAND			INFLAMMATION	+	
			SEMINAL VESICLE	ATROPHY	+ + +	АТВОРНУ	+	
			HARDERIAN GLANDS			INFILTRATION OF LEUCOCYTES (UNILATERAL)	+	
			BRAIN			PIGMENTATION	+	

11-M4-0347 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

1000 PPM MALE LEVEL AND SEX :

1	1	1			. !		1 1 1 1 1	STUDY NO. 83004
ANIMAL	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0347	>-	736	MULTIPLE ORGANS			MONONUCLEAR CELL LEUKEMIA	 	MONONUCLEAR CFIT I FILKEMIA
			LYMPH NODES	ENLARGEMENT	+ +			: MULTIPLE ORGANS ADENOMA: PITUITARY GLAND
			SPLEEN	ENLARGEMENT	* +° +			
			NASAL CAVITY			INFILTRATION OF LEUCOCYTES	÷ +	·
			LARYNGOPHARYNX		5	CYSTIC DILATATION OF GLAND	*	
			LUNG		3	CALCIFICATION OF VASCULAR WALL	+	
			LIVER		<u>и, п.</u>	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS	+ + + +	
			KIDNEYS		O 6	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	* +	
			TESTES	ENLARGEMENT (UNILATERAL) SOFTENING (UNILATERAL) NODULE (UNILATERAL)	+ + + + + - + - +	LEYDIG CELL TUMOR (UNILATERAL) HYPERPLASIA OF LEYDIG CELLS (UNILATERAL)	‡	
			SEMINAL VESICLE	ATROPHY	++ A.	АТКОРНҮ		
			PITUITARY GLAND	ENLARGEMENT HEMORRHAGE	+ + + +	ADENOMA		
			MAMMARY GLAND	·	Q	DILATATION OF GLAND	+	
1) (7)	FATE:	AFTEI	1) FATE: Y KILLED ON SCHEDULE 4) DAYS: AFTER START OF TREATMENT	2) GRADE	NEGATIVE NOT L SLIGHT H NODERATE H+ SEVERE	PRESENTED 3) GRADE B C C C C C C C C C C C C C C C C C C	OF MASS: SMACL AND/OR MEDIAL AND/OR LARGE AND/OR	OF MASS: SMACL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

CONTINUED 11-M4-0347 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

\$300¢ 0.0 8300¥	GROSS PATHOLOGICAL 2)3) HISTOPATHOLOGICAL 2) FINDINGS GRADE FINDINGS GRADE	Ğ	INFILTRATION OF LEUCOCYTES (UNILATERAL)	
	ORGAN	1 1 1	Y 736 HARDERIAN GLANDS	BRAIN
	ANIMAL 1) 4) FATE DAYS NUMBER		0347 Y 736	

1) FATE : Y / KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

3) GRADE OF MASS:
A . SMALL AND/OR SINGULAR
B . MEDIAL AND/OR SPORADIC
C . LARGE AND/OR MULTIPLE 2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ MODERATE +++ SEVERE

3) GRADE OF MASS :	A , SMALL AND/OR SINGULAR B , MEDIAL AND/OR SPORADIC C , LARGE AND/OR MULTIPLE
2) GRADE : NEGATIVE NOT PRESENTED 3) GRADE	+ > SLIGHT ++ > MODERATE +++ > SEVERE
1) FATE : Y , KILLED ON SCHEDULE	4) PAYS : AFTER START OF TREATMENT

APPENDIX 11-M4-0348

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

GS GRADE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS WEMIA : MONONUCLEAR CELL LEUKEMI : MULTIPLE ORGANS + LEYDIG CELL TUMOR: TESTE + + + + + + + + + + + + + + + + + + +	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			1			STUDY NO. 83004
HEART HEART HEART HEART HEART HEART HYPERPLASIS RANDONUCLEAR CELL LEUKEMIA HYPERPLASIA RETICULUM CELLS RETICULUM CELLS RETICULUM CELLS RETICULUM CELLS HYPERPLASIA RETICULUM CELLS HYPERPLASIA HYPERPLASIA LUNG LIVER RATTY DEGENERATION OF HEPATIC CELLS HYPERPLASIC ROBULE HYPERPLA	1	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOL	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
FIBROSIS + CONTINUE CELLS HYPERPLASIA OF EPITHELIAL + LEYDIG CELL RETICULUM CELLS ROW CONGESTION HEMOSIDEROSIS HEMOSIDEROSIS HEMOSIDEROSIS CALCIFICATION OF LEUCOCYTES CALCIFICATION OF WASCULAR WALL FATTY DEGENERATION OF HEPATIC CELLS HYPERPLASTIC NOBULE HYPERPLASTIC NOB	0348	>-	736	MULTIPLE ORGANS			MONONUCLEAR CELL LEUKEMIA	1 1 1 1 1 1 1	MONONUCLEAR CELL LEUKEMIA
HYPERPLASIA OF EPITHELIAL RETICULUM CELLS FATTOLLUM CELLS ++ CONGESTION HEMOSIDEROSIS + + CONTEGENESIS + + CALCIFICATION OF LEUCOCYTES + + FATTY DEGENERATION OF HEPATIC CELLS + + FATTY DEGENERATION OF HEPATIC CELLS + + FOCAL ATROPHY OF HEPATIC CELLS + + FOCAL ATROPHY OF BILE DUCT + HYPERPLASTIC NODULE HYPERPLASTIC NODULE HYPERPLASTIC NODULE ++ CLOMERULONEPHRODATHY (BILATERAL) + + GLOMERULONEPHRODATHY (BILATERAL) + + FOLDMERULONEPHRODATHY (BILATERAL) + + FOLDMERULO				HEART			FIBROSIS	+	: MULTIPLE ORGANS LEYDIG CELL TUMOR: TESTES
FOULTY OSTEOGENESIS UITY OSTEOGENESIS INFILTRATION OF LEUCOCYTES CALCIFICATION OF WASCULAR WALL FATTY DEGENERATION OF HEPATIC CELLS ANGIECTASIA FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS HYPERPLASTIC NODULE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)				THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	
INFILTRATION OF LEUCOCYTES CALCIFICATION OF VASCULAR WALL FATTY DEGENERATION OF HEPATIC CELLS ANGIECTASIA FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS HYPERPLASTIC NODULE CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)				SPLEEN	. ENLARGEMENT	+ +	CONGESTION HEMOSIDEROSIS	+ +	
CALCIFICATION OF LEUCOCYTES CALCIFICATION OF VASCULAR WALL FATTY DEGENERATION OF HEPATIC CELLS ANGIECTASIA FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS HYPERPLASTIC NODULE CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)				BONE MARROW			OSTEOGENESIS	+	
CALCIFICATION OF VASCULAR WALL FATTY DEGENERATION OF HEPATIC CELLS ANGIECTASIA FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS HYPERPLASTIC NODULE CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)				NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
FATTY DEGENERATION OF HEPATIC CELLS ANGIECTASIA FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS HYPERPLASTIC NODULE CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)				רחאפ			CALCIFICATION OF VASCULAR WALL	+	
HYPERPLASTIC NODULE CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)				LIVER			FATTY DEGENERATION OF HEPATIC CELLS ANGIECTASIA FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS		
CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)				PANCREAS			HYPERPLASTIC NODULE	+ +	
				KIŅNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL)	+ + +	

CONTINUED	
11-M4-0348	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX: 1000 PPM MALE

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1	i ! !			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
ANIMAL 1) 4) FATE DAYS NUMBER	1) FATE	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HOLOGICAL 2)3) HISTOPATHOLOGICAL FINDINGS GRADE FINDINGS	9 1	2) PROBABLE CAUSE RADE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0348	>-	736	KIDNEYS			INFILTRATION OF LEUCOCYTES (BILATERAL)	+	
			TESTES	ENLARGEMENT (BILATERAL) NODULE (BILATERAL)	+ + + + +	LEYDIG CELL TUMOR (BILATERAL)		
			SEMINAL VESICLE ATROPHY	ATROPHY	+ + +	ATROPHY	++	

1) FATE : Y , KILLED ON SCHEDULE 2) GRADE : NEGATIVE NOT PR + , SLIGHT + , NONFRATE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT ++ NODERATE +++ SEVERE

APPENDIX 11-M4-0349

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

ANIMAL 1) RATE NUMBER	1) 4) TE DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICA FINDI	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
W 67E0	729	MULTIPLE ORGANS			MONONUCLEAR CELL LEUKEMIA	 	MONONUCLEAR CELL LEUKEMIA
		HEART			FIBROSIS	+	: MULTIPLE ORGANS NECROSIS: ADRENAL GLANDS
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	NECROSIS: TESTES
		SPLEEN	ENLARGEMENT	+ +	CONGESTION HEMOSIDEROSIS	+ +	
		BONE MARROW			ACTIVATION OF HEMATOPOIESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LUNG	REDDISH CHANGE	+++	CALCIFICATION OF VASCULAR WALL	+	
		LIVER	MASS ROUGHNESS OF SURFACE	4 +	MIGRATION OF HEMOSIDERIN-LADEN CELLS PROLIFERATION OF BILE DUCT	+ +	
		PANCREAS			0	++	
		KIDNEYS	ROUGHNESS OF SURFACE (BILATERAL)	+	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (UNILATERAL)	† + + + -	
		TESTES	ENLARGEMENT (UNILATERAL)	+	NECROSIS (BILATERAL)	+	
1) FATE		W . KILLED IN EXTREMIS AFTER START OF TREATMENT	2) GRADE	NEGATIVE NOT + SLIGHT ++ MODERATE	PRESENTED 3) GRA	DE OF MASS SMALL AN MEDIAL A	OF MASS: SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC MAGGE AND/OR SPORADIC
; ;	•	EN SIANT OF TACALL		•		- LAKGE AW	טוטא אטרוודרה

CONTINUED 11-M4-0349 APPENDIX CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

1 1	1 1 1	1						STUDY NO. 83004
ANIMAL 1) 4) NUMBER	FATE	4) DAYS	ORGAN		2)3) GRADE) HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
6720	3	729	TESTES	NODULE (BILATERAL)	+ + +			
			PROSTATIC GLAND	ATROPHY	+ + +	INFLAMMATION	+	
			SEMINAL VESICLE	АТВОРНҮ	+ + +	АТВОРНУ	+ +	
			ADRENAL GLANDS	ENLARGEMENT (BILATERAL)	+	NECROSIS (BILATERAL) VACUOLAR DEGENERATION OF CORTICAL CELLS (UNILATERAL)	+ + + + +	
			EYE BALLS			CALCIFICATION, SCLERA (UNILATERAL)	+	
			BRAIN			PIGMENTATION	+	

4) DAYS : AFTER START OF TREATMENT 1) FATE : W , KILLED IN EXTREMIS

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

11-M4-0350 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 P.P.M

	1 1 1 1 1 1 1			! ! ! !		1	STUDY NO. 83004
ANIMAL 1) FATE NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
0350 X	728	MULTIPLE ORGANS		1 5 1 1 1 1 1	MONONUCLEAR CELL LEUKEMIA		
		HEART	#'			4	LJ .
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	- - 4	ADENOMA: PILOILARY GLAND
		SPLEEN	ENLARGEMENT	++	CONGESTION	. +	•
		BONE MARROW			ACTIVATION OF HEMATOPOIESIS	• •	-
		NASAL CAVITY		ŗ	INFILTRATION OF LEUCOCYTES	4-	•
		LARYNGOPHARYNX		J	CYSTIC DILATATION OF GLAND	+	
		PNNG	CONGESTION	+			
		LIVER	ENLARGEMENT	+ +	FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT	+ +	
		PANCREAS		A	ATROPHY OF PANCREATIC ACINUS	*	-
		KIDNEYS		ပ		+	
		TESTES	ATROPHY (BILATERAL)	± +	HYPERPLASIA OF LEYDIG CELLS (BILATERAL)	+	
		PROSTATIC GLAND		I	INFLAMMATION	+	
		SEMINAL VESICLE		A	АТКОРНУ	+	
1) FATE	× :	FOUND DEAD	2) GRADE :	 NEGA	PRESENTED 3) GRADE	OF MASS	
4) DAYS	: AFTE	4) DAYS : AFTER START OF TREATMENT	+	+ / SLIGHT ++ / MODERAT +++ / SEVERE	W W Y	SMALL AND/OR MEDIAL AND/OR	SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MILLIPLE
`							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

-			
TATIOTIS			
2	H	RATE	ш
	+ SLIGH	MODE	SFVF
ò	`	`	•
Z	+.	++	++
•		•	+
2			

2) GRADE : NEGATIVE NOT PRESENTED

4) DAYS : AFTER START OF TREATMENT

1) FATE : X , FOUND DEAD

CONTINUED 11-M4-0350 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

STUDY NO. 83004	(2)	GRADE	- PATHOLOGICAL FINDINGS		+	+
	2)3) HISTOPATHOLOGICAL GRADE			++ ADENOMA	HEMORRHAGE	HEMORRHAGE
	GROSS PATHOLOGICAL FINDINGS			HEMORRHAGE		
	ORGAN			X 728 PITUITARY GLAND	BRAIN	SPINAL CORD
) 4) E DAYS		1 1 1 1 1 1 1 1 1	728		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ANIMAL 1) 4) FATE DAYS	NUMBER	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0350 X		

2) GRADE : NEGATIVE NOT PRESENTED + , SLIGHT ++ , MODERATE +++ , SEVERE

4) DAYS : AFTER START OF TREATMENT

1) FATE : Y , KILLED ON SCHEDULE

11-M4-0351 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

ANIMAL 1) FATE D NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS
\ \	736	HEART		! ! ! ! ! ! !	FIBROSIS	 	PHEOCHROMOCYTOMA: ADRENAL
		LYMPH NODES			BLOOD ABSORPTION	+	GLANDS LEYDIG CELL TUMOR: TESTES
		SPLEEN			HEMOSIDEROSIS EXTRAMEDULLARY HEMATOPOIESIS	+ +	
		BONE MARROW			OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LUNG			CALCIFICATION OF VASCULAR WALL	+	
		LIVER			FATTY DEGENERATION OF HEPATIC CELLS FOCAL ATROPHY OF HEPATIC CELLS SMALL GRANULOMA PROLIFERATION OF BILE DUCT WITH FIBROSIS INFILTRATION OF LEUCOCYTES	+ + + + + 0	
		PANCREAS			INFILTRATION OF LEUCOCYTES	+	
	·	KIDNEYS		<u>.</u>	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
		TESTES	ENLARGEMENT (BILATERAL)	+ + +	LEYDIG CELL TUMOR (BILATERAL)		

CONTINUED 11-M4-0351 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE LEVEL AND SEX : 1000 PPM

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1	1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			S
ANIMAL 10	1)	7)	ORGAN	GROSS PATHOLOGICAL	2)3)	TO TOO TONE VALUE OF THE PROPERTY OF THE PROPE		! ! ! !
NUMBER	А П	DAYS		FINDINGS	GRADE	FINDINGS	2) GRADE	PROBABLE CAUSE OF DEATH OR MAJOR
		 			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		: : : : :	FAIHULUGICAL FINDINGS
0351	>	736	TESTES					
				NODULE (BILATERAL)	` + +			
			PROSTATIC GLAND			INFLAMMATION	+	
			SEMINAL VESICLE ATROPHY	ATROPHY	++++	АТКОРНУ	+	
			ADRENAL GLANDS	MASS (UNILATERAL)	υ	PHEOCHROMOCYTOMA (UNILATERAL)		
			BRAIN		_	PIGMENTATION	+	

1) FATE : Y , KILLED ON SCHEDULE

4) DAYS : AFTER START OF TREATMENT

2) GRADE : NEGATIVE NOT PRESENTED + SLIGHT + MODERATE +++ SEVERE

APPENDIX 11-M4-0352

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

LEVEL AND SEX : 1000 PPM MALE

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
ANIMAL 1) NUMBER	4) DAYS	ORGAN	GROSS PATHOLOGICAL FINDINGS	2)3) GRADE	HISTOPATHOLOGICAL FINDINGS	2) GRADE	$\Gamma \cap \Sigma$
0352 X	711	HEART			FIBROSIS	+	1
		THYMUS			HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	+	LEYDIG CELL TUMOR: TESTES
		SPLEEN			HEMOSIDEROSIS	+ +	
		BONE MARROW			OSTEOGENESIS	+	
		NASAL CAVITY			INFILTRATION OF LEUCOCYTES	+	
		LUNG	CONGESTION	+ + +	CALCIFICATION OF VASCULAR WALL	+	
		LIVER			FATTY DEGENERATION OF HEPATIC CELLS PROLIFERATION OF BILE DUCT WITH FIBROSIS	+ + + ×	
		PANCREAS		-	ATROPHY OF PANCREATIC ACINUS	+	
		KIDNEYS			CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY (BILATERAL) PIGMENTATION (BILATERAL) INFILTRATION OF LEUCOCYTES (BILATERAL)	+ ++	
		TESTES	ATROPHY (BILATERAL)	+	LEYDIG CELL TUMOR (UNILATERAL)		
		SEMINAL VESICLE	NODULE (BILATERAL)	++	АТКОРНУ	+	
1) FATE	× · ·	FOUND DEAD	2) GRADE	. NEG/	NOT PRESENTED 3) GRADE	OF MASS	
4) DAYS	: AFTER	R START OF TREATMENT		++	~ ~ ~ ⊕ ∪	SMALL AND/OR MEDIAL AND/OR LARGE AND/OR	SMALL AND/OR SINGULAR MEDIAL AND/OR SPORADIC LARGE AND/OR MULTIPLE

CONTINUED 11-M4-0352 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

INDIVIDUAL PATHOLOGICAL FINDINGS

MALE 1000 PPM LEVEL AND SEX :

	E INGS			
STUDY NO. 83004	2) PROBABLE CAUSE GRADE OF DEATH OR MAJOR PATHOLOGICAL FINDINGS			
	2) GRADE		+	+
STUDY NO. 83004	HISTOPATHOLOGICAL FINDINGS	ADENOMA	DILATATION OF GLAND	HYPERSECRETION (BILATERAL)
1	2)3) GRADE	+ + + + + +		
] 	OLOGINDI	ENLARGEMENT HEMORRHAGE		
	ORGAN	PITUITARY GLAND	MAMMARY GLAND	HARDERIAN GLANDS
 	1) 4) FATE DAYS	711		
 	1) FATE	×		
; ; ; ; ;	ANIMAL 1) 4) FATE DAYS NUMBER	0352		

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PRESENTED				
1	VE NOT	[GHT	DERATE	VERE	
1 1 1 1 1 1 1	: NEGATIV	+ SLI	10M / ++	+++ SEV	
1 1 1 1 1	GRADE			•	
1 1	5)				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				REATMENT	

4) DAYS : AFTER START OF TREATMENT

1) FATE : X , FOUND DEAD